

## SUGGESTED PRINCIPLES FOR EFFECTIVE INTERGOVERNMENTAL RELATIONSHIPS IN HIGHWAY AFFAIRS

Norman Hebden, Highway Research Board  
and  
Ralph S. Lewis, Bureau of Public Roads

● Rapid, convenient and efficient transportation is a keystone in our national economy. Highway transport occupies an important place in the transportation picture, made possible by the development of a highway network which includes every road and street throughout the nation. Continued social and economic progress requires the adequate development of this network in its entirety, to serve effectively present and future transportation needs of agriculture, industry, commerce and community life. The highway network must fill these needs efficiently and economically, and at the same time provide for increased highway safety and the elimination of costly traffic congestion.

With but few exceptions, the pattern of highway administration which has evolved in this country places responsibility for roads and streets in the hands of the several governmental jurisdictions — state, county, township and municipality. In accord with this division of responsibility for highways, the major interest of each unit of government is in the roads or streets which are under its direct management control. Nevertheless, each unit in any particular state also has an extensive and vital interest in the entire highway network in the state. For the value of the parts is limited unless they are welded into a whole. The travel movements of the farmer hauling his produce to a city market, or those of the metropolitan gasoline and fuel oil distributor serving the rural areas, demonstrate this point. Both use several classes of roads in such movements — the city street, the state highway and the county or township road. Each class is essential to the marketing operation. In fact, all of our highway facilities and the services rendered are interdependent, each complementing the other in the over-all scheme.

The integration and adequate development of the whole highway plant is clearly a joint responsibility of the various governmental units, demanding close coordination of effort and cooperative action in the highest degree. In every state, a proper balance in highway development is necessary. Thus, the extent and character of the relationships between and among the agencies responsible for highways in each state are of prime importance and have a significant bearing on the sound expenditure of the highway dollar.

Faced with the critical inadequacy of our existing facilities to meet traffic demands, and losing ground rather than gaining it, highway administrators have a difficult problem. Its solution will tax all the resources and "know-how" at their joint command. To successfully cope with the

problem, there must be established a real working partnership in highway affairs — a partnership of all the highway agencies in a state, marked by a spirit of openmindedness and a mutual determination to work together. Legislators and highway officials have too long overlooked the fact that the development of an adequate highway network is but one problem. To the users of that network, the invisible boundaries of the political units responsible for its parts are of no concern. All highway agencies have the same objective — to serve the public interest by providing the best possible highway plant. It is time to realize that the several highway agencies in a state can no longer go their own separate ways. Instead, they should proceed to develop a cooperative program.

In this growing area of joint responsibility and relationships numerous shortcomings exist. Examination of prevailing practice discloses, among other things, the urgent need for more adequate legislation, a clearer definition and assignment of responsibility, the establishment of comprehensive policies and cooperative procedures and uniformity in their execution, much closer coordination in planning and programming, the proper classification of highways, improved administrative practice, more adequate communications, and better mutual understanding of each other's problems.

Few guideposts toward attaining effective relationships exist for the legislator and the highway administrator. On the whole, cooperative relations of the various governmental units in highway matters have developed more or less haphazardly. In most states, problems of joint concern have largely been dealt with separately, with little thought given to the possible effects the individual decisions might have upon intergovernmental relationships considered as a whole. Such piecemeal development of relationships has not been satisfactory, as their current status and the needs already cited generally indicate. The determination of some guideposts for improved relationships, comprehensive in scope and based solidly upon the facts and experience which have been accumulated in practice, would be most helpful.

The purpose of this paper is to present some suggested principles for effective intergovernmental relationships in highway affairs, based upon the findings of a research effort which has been underway several years. The project was started in 1948 at the Yale Bureau of Highway Traffic, under a research professorship financed by the Alfred P. Sloan Foundation. The first stage was limited in scope to an analysis of state-city relations, on which subject two reports were published (1). Continuation of the project, expanding its scope to encompass the relationships of all units of government responsible for highways, was needed; and the Bureau of Public Roads along with a group of national organizations, largely representative of state, county and municipal officials, agreed to sponsor jointly a cooperative project to carry the research forward (2). The project is being conducted under the auspices of the Highway Research Board, which established an Advisory Committee to guide the course of the study.

As a part of this over-all research project, one major objective was to conduct a pilot study in a particular state. The purpose was first to determine what the relationships between the highway agencies therein are, and how they might be improved, in light of the influence of local condi-

tions or any special circumstances which might exist in the state. And second, to utilize the findings as a test of some principles for better relationships which had been tentatively formulated. Such a pilot study was undertaken in Maryland late in 1951. This project, which had the full cooperation of the Maryland State Roads Commission, was conducted for the Commission on Administrative Organization of the State (Maryland's "little Hoover Commission"). It was completed some months ago and a report was published by the Highway Research Board in September 1952 (2). This comprehensive study of highway relationships in Maryland included a thorough analysis of the statutory provisions affecting relationships, a determination of existing relationships, and a detailed examination of administrative practice. The legal analysis was primarily library research, and hundreds of both the public general laws and the public local laws were studied and briefed. The details of the operating or working relationships were obtained by discussions with state and local officials throughout the state over a period of more than four months. County Commissioners, as well as the highway officials, in all of the counties were visited. Similarly, municipal officials in all county seats and in a number of other cities were visited.

It warrants emphasis that all the groundwork in connection with this research effort has been accomplished by actual case study—going into the states and conferring with highway and other officials, reviewing pertinent legislative provisions and reports, and determining actual procedures. Thus the findings are based on practical considerations, rather than on theoretical concepts.

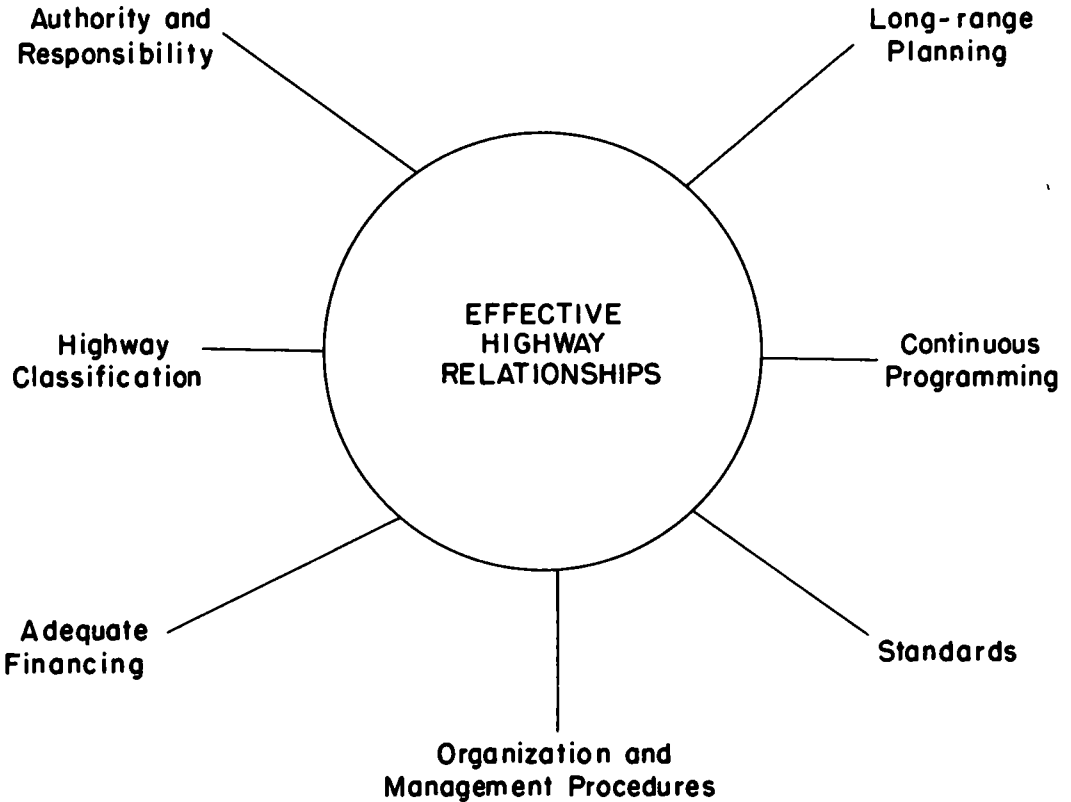
Before going further, two or three observations will be of interest. In the course of this research, it has been noted that a specific principle may seem to be axiomatic and rather widely recognized, at least when treated as a single item in discussions with highway officials. Yet, there is ample evidence that application of that same principle is apparently "overlooked" in practice in the confusion of the whole problem of relationships. Attention has also been brought to the fact that in some instances a procedure is being followed consistently in practice without the realization that it actually represents the application of a principle. Furthermore, the basic principle which will be suggested will not, alone, always be self-sufficient. The way in which it is carried out is often equally important. It is necessary and desirable, therefore, to set forth certain corollaries. These are indicated herein.

From all that has gone before, there is clearly a need for better understanding of the problem of relationships. The provision of maximum highway service, today, requires that the several systems of roads and streets which make up the complete highway network in a state, be well integrated, adequately improved, and efficiently managed. Each unit of government having jurisdiction over highways or streets shares this responsibility. And successful accomplishment of this joint task calls for the development of new and extensive cooperative relationships.

Turning now to a consideration of the principles which underlie effective intergovernmental relationships, the areas which block out the framework for such relationships are indicated in the first chart. Additional

charts summarizing the principles within each of the areas shown are printed on succeeding pages. We have as a starting point the basic premise that the adequate development of the highway transportation network in any state is a single problem, as has been emphasized, even though portions of that network are administered by different units of government.

### FRAMEWORK FOR EFFECTIVE HIGHWAY RELATIONSHIPS



Thus, with separate administration the established pattern, the first step required is to provide the various governmental units adequate authority and responsibility to enable them to manage efficiently their respective portions of the highway network. Yet, highway legislation often fails to measure up in this respect, being inadequate, indefinite, and confusing. For example, a permissive law which provides that the state highway department may assume responsibility for urban extensions of state highways simply begs the question and is of small aid to cities. The crux of the matter is—what responsibility, to what degree, and when. Such laws foster discordant rather than harmonious relationships. Sometimes, on the other hand, a state will assume some obligation for such urban extensions, in the absence of any legislative sanction to do so, as is the case in Maryland. Even then the quality of relationships may be strained, however, because of variances in the extent such responsibility has been accepted by the state.

## AUTHORITY AND RESPONSIBILITY

Highway laws should:

Clearly define and assign authority and responsibility for highway function at each governmental level

1. Distinguish between policy-making and administrative functions.

The existing authority and responsibility of a highway agency and of its top-level officials is often unclear at the several governmental levels. To illustrate, we may call on the Maryland study again, where it was found that the express legal provisions for the state highway agency extend only to a state highway system that was selected in 1909, plus any existing county roads the state may have taken over since that time. Also, there is no definition of the respective authorities and responsibilities of the State Roads Commission, which is a three-member body, and its chief engineer, either by law or by administrative directive. These things inevitably result in confusion and eventually are detrimental to relationships. At the local level, general authority over roads and streets is given to the governing bodies of both counties and cities. But, again, the legislation does not define the responsibilities of either the governing body or the road or street head, and the possibility of friction and misunderstanding is enhanced. In addition, it was found that while there is existing legislation which gives the county commissioners authority over county roads, the same authority is provided all over again by the provision of special legislative enactments for 19 of the 23 counties in the state. Obviously there is no need for such duplication.

Such examples as these demonstrate the need for adequate definition and delegation of authority and responsibility for the highway function at all levels of government. And an additional criterion to be satisfied is the clear separation of the policy-making function from the administrative function. Without these, relationships between all highway agencies in a state are adversely affected and sound administration is impossible. It is manifest that the first basic principle and its corollary are as follows:

- I. The highway laws in each state should define clearly and assign definitely authority and responsibility for the highway function at each level of government.
  - a. The legislation should also clearly separate the functions of policy making and administration.

At this point, the governmental units at each level have been given jurisdiction over a portion of the over-all highway network, along with a clear mandate as to their responsibility and authority therefor. But what,

precisely, constitutes their respective portions of that network? The answer to this lies in classifying all of the roads and streets in a state, ranging from the major controlled-access highway to the country road or suburban street. Highway classification is of fundamental importance. It not only provides for the clear-cut assignment of detailed administrative and financial responsibility, but it also provides the foundation for the establishment of a long-range plan, priorities for improvements, and a fiscal program.

Yet, in classification, we have a perfect example of a widely recognized principle, but one which is inadequately applied in practice. Existing highway systems in every state have built up under changing policies and objectives, varying practices, and political factors so that, in general, highway classification today presents a confused picture. For example, systems overlap, division of responsibility is unclear, split jurisdiction exists over alternate sections of a continuous route, and systems include roads for which there is no justification on the basis of traffic service. Furthermore, classification at the local level has been especially weak. Obviously, intergovernmental relationships are vitally affected by proper classification for it largely determines the real extent of the job of each unit. Classification cannot be done haphazardly; it requires careful study, and the task should be carried out with the full cooperation of local units if good relations are to prevail. A second principle thus stands out clearly.

- II. Legislation in each state should require the classification of all highways and streets into systems, based on the character and extent of traffic service rendered.

In the application of this principle, the important adjuncts are that the legislation should provide for:

### HIGHWAY CLASSIFICATION

In each state, legislation should:

Require classification of all highways and streets

1. Establish criteria defining systems of highways
2. Assign responsibility for the systems
3. Make provision for cooperative classification
  - a. Emphasis on local participation
  - b. Final approval of systems vested in state
4. Authorize additions to systems within prescribed limits

## ADEQUATE FINANCING

Legislation (state and local) should:

Provide adequate financial support for highways in accord with fiscal studies

1. Specifically prescribe financial responsibility of each governmental unit for cooperative undertakings

- a. The establishment and adoption of a classification scheme, defining the various classes or systems of roads and streets.
- b. The assignment of responsibility for each system to the most appropriate unit of government.
- c. The exercise of the fullest cooperation between the governmental units at all levels in the task of selecting and grouping the roads and streets into systems, with the local units either doing the job or participating in it, with final authority for approval of the systems vested at the state level.
- d. The making of additions to the systems, but only on the basis of a factual study and within some prescribed limit to avoid uncontrolled additions to system mileages.

Next, it is necessary to determine what the highway job ahead is, what the financial requirements are, and how the job can be accomplished. The modernization of highway facilities is an imperative need; and it is a difficult task because of its magnitude and the heavy costs involved. Adequate planning and programming provide the only means to accomplish the task. A long-range highway development plan should be compiled which will determine needed improvements and financial requirements for a period of 10 to 20 years in the future. Since no long-range plan is static, it should be reappraised at appropriate intervals. Coupled with this a continuous programming procedure should be initiated, providing for the scheduling of projects over a specified period of time, in accordance with a financial plan, and a periodical renewal of the program. This process should be a continuous one, in that at each budget time the program should be reviewed, making any necessary revisions to meet changed circumstances and adding another increment of new projects to replace those completed. Local governments should report to the state periodically on work completed and future work scheduled. Use of this technique provides for the step-by-step accomplishment of a long-range plan.

In recent years there has been an accelerating development in the states in the compilation of long-range plans, and it is widely recognized that such plans must be compiled for local roads and streets as well as for state highways. However, little progress has been made toward the introduction of continuous programming. In most states, there is still too little understanding on the part of highway people, especially at local levels, of how these essentials of good management can be applied, and of the values inherent in them. Increased effort toward their use must be made and constantly revitalized. Each governmental unit should have a long-range development plan and should initiate sound programming. The state should encourage and assist this development; and since the integration of plans is essential to the realization of maximum highway service, the state should be authorized to coordinate and review the long-range plans of local governments and to establish standards for a satisfactory plan. This brings out two interrelated principles which embody the described approach and which have considerable effect in the development of cooperative relationships.

- III. Legislation should authorize and direct an appropriate agency of the state and of each local governmental unit to prepare, individually or jointly, a long-range plan for highway development over a specified period of years.

The legislation, furthermore, should authorize and direct:

- a. The complete cooperative action between the state and local units in all phases of the task.
- b. Each unit to re-appraise its plan at appropriate intervals.

### LONG-RANGE PLANNING

Legislation should:

Require each governmental unit to prepare a long-range highway development plan

1. Authorize cooperative preparation of plan
2. Require re-appraisal of plan at appropriate intervals
3. Authorize appropriate state agency to coordinate the work
  - a. Review local plans
  - b. Establish standards for satisfactory plan



## CONTINUOUS PROGRAMMING

### Legislation should:

Authorize and direct state and local units to prepare a short-term improvement program based on their long-range plans

1. Establish period of time program is to span
2. Require financial plan
3. Authorize state to assist local units in task
4. Establish continuous programming procedure by requiring units to review their programs periodically, adding new projects to replace those completed
5. Require periodic progress reports by local units

- c. The state agency to effect coordination of the work, to review the plans of local units, and to outline the essentials of a satisfactory plan.

- IV. Legislation should authorize and direct the state and each local unit to prepare a short-term improvement program, including a financial plan, for a specified program period, based upon their respective long-range plans.

In order to maintain a continuing program and to provide for adequate coordination, the legislation should authorize and encourage the state to assist local units in this effort and also require:

- a. Each unit to review its program at budget time, making adjustments to meet changing needs and adding a new increment of projects to replace completed ones.
- b. Each local unit to report periodically to the state, setting forth work completed in the preceding period and listing the work programmed for the following period.

With the roads classified and the highway task mapped out in detail, each governmental unit has its responsibility for roads or streets clearly established. The next essential to meeting that responsibility is the matter of adequate financing. It is not within the purview of this research project to evaluate methods of financing or ways in which revenues are distributed among the highway agencies in a state. Certainly highway finance is a key problem faced today; and extensive research in this field is

10.

urgently needed in all states. However, in terms of principles, it will suffice here to point out that governmental units at each level must be enabled to finance their assigned portion of the highway function. In addition, legislative sanction and financing of special studies of all phases of the highway problem - needs, fiscal requirements and resources, and management - should be provided.

User-taxes, state aid, local taxes and credit financing are, of course, the major sources of highway revenue. In so far as local governments are concerned, the importance of state aid is universally recognized; and the widespread use of this method of financing local roads and streets has a tremendous effect upon relationships. It can be the means of establishing close, cooperative relations, or it can cause undesirable friction. Moreover, in the case of projects of joint interest where financial responsibility is shared by governmental units, the terms should be definitely spelled out and they should be applied uniformly. This is in direct contrast to the situation not infrequently found in practice where these matters are left for consideration and decision in each individual case. This tends to put things on a "bargaining" basis, which leads to strained relationships. The next principle, therefore, is:

- V. Adequate financial support of highways, in accord with fiscal studies, should be provided through appropriate state and local legislation.
  - a. In the case of cooperative undertakings, legislation should specifically establish the respective financial responsibilities of each governmental unit, and the terms established should be applied uniformly.

## STANDARDS

In each state:

Formalized construction and maintenance standards for local roads and streets should be developed cooperatively

1. Legislation should establish state-wide committees to formulate standards
  - a. Separate committees for local rural roads and city streets
  - b. State highway agency provided minority representation on each committee

## ORGANIZATION AND MANAGEMENT PROCEDURES

In each state:

Highway legislation and management procedures should be reviewed and revised to provide effective administration machinery

### 1. Management

- a. At state level, establish single staff unit responsible for cooperative undertakings and coordination thereof.
- b. At local level, designate local road head to coordinate local activities and delegate to him adequate powers of negotiation

2. State Administrative Supervision Require use of essential methods of supervision, with emphasis on advice and service

3. Cooperative Arrangements Legislation should authorize all units to enter into cooperative arrangements with one another

4. Communications All means of communication should be fully exploited by the state, using such methods as policy directives, manuals of practice, and periodic and special conferences

In the determination of highway needs, the compilation of long-range plans, and the actual preparation of project plans, it is necessary that standards be developed for the various classes of roads and streets. The matter of standards is, in fact, of broadest significance for it affects the quality and economy of highway service. This may be exemplified by the failure of a county or township unit to grade its roads to a satisfactory standard, so that in winter the snow piles up and blocks the roads. As a consequence, there is not only incurred the inconvenience and economic loss to highway transport, but the cost of snow removal also becomes an outsized item. The inadequacy of standards can also hasten obsolescence.

Local governmental units frequently do not have formalized standards for construction and maintenance. Instead, the ideas of the local engineer as to an adequate standard for each individual project govern. Consequently, standards vary from job to job; and since such informal standards are determined by a single individual, they often do not reflect the benefits which might result from group deliberation and cooperation. The matter of standards has been the source of much controversy in many states and impinges

sharply upon the quality of relationships. For example, the arbitrary imposition of a state standard for local projects, with little consideration of local conditions, is unrealistic and leads to friction. On the other hand, the random use of the rule-of-thumb method, heavily influenced by a strong desire to stretch available local funds farthest, is equally undesirable. Proper standards are needed, and their development through joint deliberation, making full use of the knowledge and experience of the highway engineers of both state and local units, would yield the best result. This suggests the next principle:

VI. Formalized construction and maintenance standards for local roads and streets should be developed cooperatively in each state.

- a. Standards for local rural roads should be developed by a representative group of local highway officials in a state, on which group the state highway agency should be represented. Standards for city streets should be developed by a similar representative group of city highway officials, with state highway department representation.

The remaining principles concern organization and management responsibilities, and for the sake of brevity they may be treated together because of their close interconnection. If we are to have cooperative and beneficial relationships in highway affairs, there must be provided effective administrative machinery as well as legislative authority for the establishment of cooperative working procedures. Legislators and highway officials of all units of government must recognize the principles of organization, the value rather than any onus of state administrative supervision, the benefits of cooperative working procedures, and the need for the full dissemination of information and frequent direct contact between the staffs of the state and local highway units. In practice, it is found that these things are often overlooked. A broad principle may be stated as follows:

VII. Highway legislation and management practices in each state should provide effective administrative machinery for the conduct of cooperative highway operations.

Existing legislation and administrative practices in each state should be thoroughly reviewed and where necessary, revised to accomplish this end. This broad principle can only be given meaning, of course, by the introduction of specific supplementary principles. These are stated below, following a brief commend indicative of their need.

First, with respect to over-all management, the inadequate staff assignment of authority and responsibility for cooperative undertakings at all governmental levels, and inadequate liaison between units, are weaknesses requiring attention. Both materially affect good relations. A necessary corollary to the broad principle is:

- 1.a. At the state level, all responsibility for cooperative undertakings should be consolidated into a single staff

unit, and the head of this unit should report directly to the top administrator of the state highway agency.

The head of this unit should serve in a liaison capacity with the local governmental units; he should coordinate all work of joint interest, including such activities as the initiation of projects and broad planning, the compilation of programs, the formulation of standards, and the working out of cooperative arrangements; and he should be provided adequate staff to discharge these responsibilities with respect to both county and municipal work.

- 1.b. At the local level, each governmental unit should designate the head of its road organization, to coordinate all its activities affecting highways, and within fixed policies, and should delegate to him adequate powers of negotiation so that he can deal effectively with state highway officials.

Secondly, state administrative supervision is an important adjunct of effective management machinery. This type of supervision is not concerned solely with control measures and the accountability process. It also includes the vital function of providing advice and services to local units. Contrary to the offhand reaction, the exercise of such supervision need not be onerous. While local units should, for example, be held accountable for the expenditures of state-aid funds, the real objective of the supervisory techniques is to help the local units do a better job. The supervisory processes of inspection, reports, approval of plans and so on have their place; however, all-out encouragement should be given the service aspect as exemplified by the conduct of research by the state, the testing of materials, the making of traffic and parking surveys, and the giving of advice and assistance with respect to equipment, specifications, and operations. Sometimes the matter of the state highway agency providing such technical assistance is avoided on the ground that such action might be construed by local officials as being interference on the part of the state. This demonstrates clearly the need for better understanding and for the adoption of an objective attitude toward utilization of the best available resources in dealing with a problem. Consequently,

2. In the case of state aid or other cooperative highway undertakings, state legislation should authorize and direct the exercise of essential methods of administrative supervision, including records and reports, inspection, review, and the provision of technical advice and service.

Next, harmonious relationships require that cooperative working procedures be established, and that the statutes authorize the various governmental units to enter into cooperative arrangements with one another in carrying on highway activity. In the absence of clear authority, or if procedures are not designed to enable the governmental units to work together, the development of mutually beneficial relationships is severely restricted. In short:

3. Legislation should be provided authorizing the highway agen-

cies at all levels of government to enter into cooperative arrangements with one another for the performance of highway work, and to make formal or informal agreements as to the use of equipment, purchase of materials, employment of engineering services, mutual aid, and the provision of various services.

Lastly, with respect to management practices, the matter of communications—within a state highway agency, between it and the local units, and among local units—is basic to good relationships. The development of understanding and cooperation rests heavily upon the adequate transmission of information and interchange of thoughts and ideas. In many instances, existing lines of communication in highway agencies need strengthening, whether one thinks in terms of the informal spoken word, the written document, or the exchange of ideas and opinions at group conferences. By such means misunderstandings can be avoided. The final supplementary principle, therefore, is:

4. All means of communication should be fully exploited, to disseminate information as to policies and procedures and to increase understanding, by the use of policy directives, manuals of practice, informational bulletins or letters, and regular and special conferences bringing together highway officials of the several governmental levels at frequent intervals.

In closing, the foregoing principles in the areas of authority and responsibility, highway classification, adequate financing, long-range planning, continuous programming, standards, and organization and management procedures, together, provide the framework for a close, working partnership in highway affairs. In order to increase their effectiveness, the principles should be reinforced by a clear and forthright statement of legislative policy in support of cooperative relationships in highway undertakings. The policy statement should leave no doubt that it is the intent of the legislature that such relationships are to prevail. It is recognized that the principles will not in themselves guarantee good relations. In the end, it is the individuals concerned who determine the kind of relationships which will exist. Highway officials of all governmental units, who after all have the same mutual objective, must supply the initiative and the will to create the cooperative relationships needed in solving the highway problem.

## REFERENCES

1. "State-City Relationships in Highway Affairs," Norman Hebden and Wilbur S. Smith, Yale University Press, 1950.  
"Effective Administration in State-City Highway Activity," Norman Hebden, Yale Bureau of Highway Traffic, 1951.
2. The cooperating organizations are: The Council of State Governments, American Municipal Association, National Association of County Officials, U. S. Conference of Mayors, U. S. Bureau of Public Roads, American Public Works Association, and the Automotive Safety Foundation.
3. "Highway Relationships in Maryland," Highway Research Board, Special Report 6, 1952.