to secure the federal grant and to assist in developing the scope of the studies up to and including contracting with the consultants who will do the job.

We attempt to schedule, or at least anticipate, these local projects as far in advance as possible so that they can be properly considered in the appropriation process. The entire Department of Transportation operates from a 5-year budget and work program.

This works fine with highway projects because funding is more predictable; but, with UMTA funds and projects generating at the local level, the third, fourth, and fifth years of the public transportation get rather "iffy." If we can get the federal funding channelization bill through the legislature, this will do much to improve the validity of the budget and work program. With a 5-year approach to the major projects, development time becomes secondary in importance to the system design concepts.

In most cities public transportation has become a public utility. It is essential to the life of the community, and public subsidization is not only desirable but necessary. Most communities have had to establish fees for certain services such as garbage disposal and sewer systems, and these fees are assessed whether or not the services are used. It is a funny thing that we quite willingly will pay these fees to haul our garbage and to transport our sewage, but not to transport ourselves. It is our great love affair with the private automobile that is the culprit. But more and more we are coming to realize that public transportation is just as essential to our well-being as any of the other public utilities.

Since no city or county can likely operate an adequate public transportation system at a profit, we must get a firm local commitment of ongoing support at the outset. Even though the federal and state governments will provide the bulk of the initial financing for capital equipment and the technical assistance, the local government is ultimately charged with the responsibility of operating the system. Therefore, the local authority will have the greater voice in determining the level of service and the fees to be charged, for depreciation and operational cost must be borne by and large by the local community.

What can the planner or engineer do, if anything, to influence the implementation of public transportation? Planning is very much a part of the process for developing transportation systems. Good planning has very important functions:

1. Translate project objectives into service design that will meet actual needs,
2. Establish the funding commitment necessary, and
3. Justify the expenditure and program to the funding agencies and user groups.

These are 3 major approaches to transportation planning:

1. Broad-scale transportation system planning with statewide benefit,
2. Specialized planning that addresses the regional transportation requirements including not only transit system requirements but also rapid transit systems, and
3. Tailored service intended exclusively for a specific urban area or often for a single group or need within the urban area (e.g., a city transit service and a transit system for the disadvantaged).

The planning process provides a sequential process that will ensure the development of a sound transportation improvement program.

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Since the 1950s, the most serious deterrent to the achievement of balanced transportation in urban areas has been inadequate funding for the public transportation mode.

With the recent impressive growth of both federal and state funding for public transportation, this problem seems on the way to being overcome. We face the prospect of actually being able to mount large capital programs for transit in our metropolitan areas without a major bloodletting over the property tax. We are, therefore, confronted, really for the first time nationally, with the problem of untangling the complicated institutional web with which we have surrounded ourselves to provide our cities with transportation. We must confront the question now of who should have the power to make decisions on urban transportation.

Furthermore, there does seem to be a general consensus among both academic observers and practitioners that we cannot reasonably discuss public transportation decisions without talking about the whole urban transportation package, including of course highways. The objective of comprehensive urban transportation planning as a part of general metropolitan planning has been explicitly required by federal law since the Federal Aid Highway Act of 1962 and has been further reinforced by numerous legislative requirements ever since, most notably by the Demonstration Cities and Metropolitan Development Act of 1966, which established the review procedure required by the Bureau of the Budget Circular A-95.

These federal requirements, and in some instances certain state statutes, have had significant institutional effects at the state and local levels. They have succeeded in getting highway, transit, and urban planners in the same room for the first time; they have forced the placement of highway and transit plans into a single document and required a synthesis of these plans; and they have resulted in the first real public debates of these issues in many urban areas.

But despite these effects, it would be hard to work up much enthusiasm yet for the policy accomplishments of these federal requirements at the local level. We have already suggested that the most important reason for this has been unbalanced financing. Certainly another reason is the inherent difficulty within the American political system of accomplishing comprehensive planning. And the third is the inadequacy of the local institutional structure.

Before discussing the last of these, we must deal with the question of whether comprehensive planning is in fact a realizable objective.

The term "comprehensive" suggests the notion not only of all-encompassing substance but also of long-range timing. The difficulties of considering everything at once and also of predicting needs (as well as desires) over the long term are immediately obvious. No one could deny that both objectives defy the best in man, and many sophisticated discussions of this subject have appeared in print. The difficulties have led some to argue that comprehensive planning is thus an ephemeral hope and that we should lower our sights.

This writer has difficultics accepting this latter view, particularly because he looks at comprehensive planning from the vantage point of transportation planning. We are faced with the indubitable fact that for major transportation facilities, whether they be highways or rail transit, the lead time from initial planning to actual completion of construction is very long. Ten to 15 years is not unusual. The only real alternative to planning such facilities in accord with some accepted broad goals—i.e., a comprehensive plan—is to plan them according to simplistic transportation goals. In fact, this is in large part just what we have done. But the accepted broad goals must be recognized for what they are, and this provides us with something of a middle way. Broad goals for 20 to 25 years hence must be understood to be adaptable over time and subject to reexamination as conditions change. And programs to meet those goals, including transportation programs, must be staged in such a way that they lend themselves to these shifts in attitude among the public and policy-makers and the resulting shifts in goals.

The question of institutions is closely related to this matter of comprehensive planning. A realistic view of the potentialities and possibilities for long-range comprehensive planning must recognize the ever-present likelihood of change. The institutions we have for the conduct of such planning and for the implementation of the programs that evolve from such planning must be highly sensitive to the changes in viewpoint and

attitude in the community that can and should effect changes in the plans. They must themselves be encompassing of all transportation policies as well as of other policies that are closely related to transportation. Our institutions must not be structured in such a way that the winds of broad community opinion are not heard because of a narrowness of access or a remoteness of geography or hierarchy.

When program agencies are unifunctional, when they are distributed among several levels of government, receiving their funding from different revenue sources in different locations, and when the only bodies that encompass all of them are frequently weaker in terms of political influence and even professional skills than the program agencies they are presumably coordinating and making policy for, then the objectives of achieving comprehensive planning, and more important that of achieving a high degree of sensitivity to changing attitudes and opinions of the relevant communities to be served, are almost beyond hope. In most of our states and urban areas, that is still the situation in which we find ourselves, despite the progress made under the stimulation of federal statutes.

The weaknesses of the present rather jerry-built institutional structure for transportation decisions are widely recognized. Most of what has been constructed to deal with these decisions has been concerned with long-range planning. Rather little has yet been done about providing coordinated, metropolitan decisions on projects. In some respects, these decisions are more important to the achievement of a region's comprehensive plans than are the grand master plans. The principal respect is that a master plan, to be meaningful, must establish priorities for projects on a multimodal basis.

In most places with which this author is familiar, whatever the priorities established in the master plan, there is no effective means of enforcing such priorities. The actual planning and construction of highway and transit projects is performed by separate operating agencies on the basis of their own funding capacity, of political feasibility, and of the agencies' own technical judgment. No metropolitan body reviews these decisions and enforces some preestablished priorities. As suggested earlier, although it is unrealistic to ignore the possibility (indeed, likelihood) of changes in these priorities over time, it seems reasonable to insist that these changes be explicitly made by the agencies responsible for the original plan, not by operating agencies on their own.

The issue must be squarely faced of what agency can best perform these functions of setting the priorities of a comprehensive plan, of issuing the directives to program agencies to proceed with project plans and implementation, and of altering the priorities and indeed the projects to meet changing conditions. Although these functions are now widely distributed, the objective should be to centralize them in a single place in each metropolitan area, for they are in fact all part of the long-range planning process.

It should be explicitly stressed at this point what our reasoning is in insisting on the above. This can best be done through example. Let us presume that a metropolitan region has in its comprehensive plan agreed on a long-range fundamental objective of establishing a strong center and strong subcenters as an alternative to sprawl. The plan calls for major and high-priority investments in fixed rail transit as one means of achieving this objective. Let us assume then that insufficient funding is available for such transit lines and substantial funding is available for new freeways on the periphery of the metropolitan area. As things stand now, the transit program would have to either await the development of new state and federal funding or go to the voters for local funding from the property tax or a local sales tax. But there would be nothing to stop the construction of the new highways. Because the fringe municipalities would probably favor the roads anyway, no political opposition would be expected from that quarter. Only the opposition from the council of governments or the metropolitan planning agency or both and perhaps from the inner-area municipalities would be expected. The (highway) program agency would ordinarily want to "get on with the job" because its success is generally measured by new roads constructed.

It should be evident from the above that the construction of the peripheral highways would be exactly counter to the objectives of the master plan even though consistent with the objectives of the state highway agency (which provides the dollars) and the

peripheral local governments in whose jurisdictions the roads would be located. It should, therefore, be equally clear that the agency that approves the master plan must also be the agency that determines project decisions. In this sense, project decisions are system decisions.

So, we turn again to our central question of who should make these authoritative decisions. Such a determination in any metropolitan area should hinge on a realistic evaluation of the present and potential capabilities of the candidate agencies. These capabilities include political muscle, technical competence, and representativeness. At present, these capabilities are rather widely distributed where they exist at all. Also, they are distributed in differing ways; in particular, the distribution among agencies of the state and those of the local area vary considerably from place to place. These facts suggest the necessity of flexibility in seeking solutions to the problem confronted here. Differing state and local political traditions militate against a simplistic, conforming solution for all urban areas.

Two major institutional trends in recent years have moved us closer to realizing the goal of a capable metropolitan transportation decision-maker. The first is the trend toward departments of transportation at the state level. The second is the rapid growth in large urban areas of councils of governments, which are usually combined with or closely related to metropolitan planning agencies. Although these metropolitan institutions have responsibilities far broader than transportation, their creation was significantly stimulated by federal transportation legislation.

The transportation-department movement has several objectives that are close to those identified above. First, such a department is intended to give to the states a comprehensive capability in the transportation field, both urban and interurban, both private and public. It significantly broadens the state's traditional responsibilities, which have been roads and regulation of common carriers. Second, the establishment of a transportation department opens the door to enhancing the powers of the state's chief executive over highways, a function that in most states has been quasi-autonomous. If the governor's powers over the highway program are increased, there is a greater likelihood that other values besides narrow highway objectives will be allowed to impact the highway program. The program is likely to be subjected to greater access of impacted as well as user groups and to competitors for the state's dollars. Third, and closely related, the highway program is likely to be less exclusively responsive to narrow highway interest groups than has been the case in the past.

The council-of-governments movement, now near universal in large urban areas, is a second-best response to the widely perceived need for metropolitan government in the United States. Its accomplishments have been modest, largely because it is almost wholly dependent on consensus for its authority, but there have been some. The very presence of the councils, and the federal legislation that stimulated their development, has forced metropolitan areas to do some thinking about goals and objectives. The council provides a forum for discussing such goals, as well as long-term transportation programs aimed at meeting such goals. The councils have identified some problems that need metropolitan solutions, in some instances have encouraged the establishment of agencies to operate such programs, and have generally built up competent planning staffs. What they have not been able to do, because of their limited authority, is to require municipalities to make decisions consistent with their plans. Our earlier illustration was intended to demonstrate that. It also demonstrated the fact that the state government's role can often be counter to the objective of strengthening these agencies despite frequent statements to the contrary by many state spokesmen.

The objective of unifying decision-making can be met, in theory, either by strengthening the council of governments so that it has the capacity to make and enforce decisions of the types described or by transferring these powers to the state. Either of these decisions will have to be made by the state and, in some states, the first solution appears to be best; in others, the second.

Let us consider the alternative of the strengthened council of governments. With very rare exceptions, there is little reason to expect a council to be significantly strengthened as a result of local initiative. Although everybody mouths the impor-

tance of "metropolitan decision-making," there are few local governments (read, local politicians) who are willing to give up really significant powers residing in their municipalities or counties. Most of what little metropolitan decision-making we now have has resulted from "carrots and sticks" emanating from Washington, D.C. In general, the states have played a passive role; they have willingly created metropolitan institutions when demanded by local leadership or referendum. But they have never to my knowledge required the establishment of such institutions over the opposition of local political leaders—as was done by Ontario in the Toronto area.

There are ways, however, that states can make use of their substantial urban transportation funding as a means of encouraging the strengthening of metropolitan institutions. As we have already suggested, the present methods of funding transportation programs in urban areas tend, in fact, to undermine these institutions. With the growth of state financial assistance to transit (in combination with federal aid), it becomes increasingly possible for states to offer to their major metropolitan areas the option of block transportation grants as opposed to the present approaches of functional grants or categorical project funding or both, with the decision-making power residing in the state in the latter case. The block transportation grant, however, is only really feasible if 2 factors are present: (a) The funds, whatever their source, must in fact be available for whatever uses the urban area chooses, in accord with its own priorities, and (b) the urban area must have the capability to make these decisions. Thus, the responsibilities of the state are, first, to provide sufficient and flexible funding so that such grants are feasible and, second, to require an adequate delegation of responsibility by the state and by the jurisdictions of the area to their council of governments to make transportation decisions.

The approach of strengthening the council of governments and devolving most major transportation decision-making to the urban area is the preferable option for most of the largest urban areas for the following reasons: (a) The federal government has already moved a long way in this direction as described earlier and, in its proposed Federal Aid Highway and Mass Transportation Act of 1972, recommended a single fund for urban areas if appropriate "consortia" are established to administer these funds locally; (b) most of our largest urban areas are located in states that either contain other large cities or are more rural than urban, and the result is either a tendency for the major metropolitan areas to compete with each other for state largesse or a dominant non- or even anti-urban ethos; (c) given the difficulty inherent in achieving a consensus on meaningful metropolitan goals and the likelihood that such goals will change over time, one can reasonably argue that locally elected officials are likely to be better "tuned in" to current and changing public attitudes than are state officials; (d) councils of governments are better suited to relate transportation to other metropolitan issues such as environmental and social questions than are state transportation agencies because of the breadth of their missions; and (e) giving councils of governments a stronger role in urban transportation should have the effect of forcing them to consider other related problems such as land use controls.

Although this option offered to metropolitan areas to make their own transportation decisions may well be sufficient to encourage improvement of metropolitan decision-making capability, it must be recognized that such a "carrot" will not always succeed in its objective. There may well be places where many local governments will prefer state authority to council authority. Councils are not infrequently viewed as weak, as dominated by particular members (either suburban or central city), or as biased toward particular policy solutions (e.g., transit). Whether such opinions are justified is beside the point; if they exist strongly enough, they can make the carrot we have suggested unworkable. In these instances, certain adaptations may be necessary to accomplish the objective. For example, it may be necessary for the state to sweeten the pill of strengthening the councils by offering a larger amount of money than would otherwise be available.

The closest that any metropolitan area has come to an approach such as that suggested above (other than those few that have metropolitan governments) is the Metropolitan Transportation Commission established in 1970 for the San Francisco Bay area.

This representative multimodal body has significant powers over both planning and project decisions and, through a memorandum of agreement, has tied itself closely to the region's council of governments, the Association of Bay Area Governments. It is not the perfect theoretical solution—which would be to give these powers to the association—but it appears to be a workable compromise.

Another approach, which seems peculiarly well suited to the Los Angeles area, is to place major stress on subregional institutions for decision-making. That area, by its SMSA definition, is so immense that there is really no sense on the part of its citizens of belonging to a single metropolitan region. This writer has suggested in another context that the counties that constitute this region be recognized as subregional decision-making units for transportation purposes and that most planning and programming decisions be delegated to that level. The Southern California Association of Governments would then be responsible only for interface decisions in the transportation field, and that would probably help to make it a more viable institution. The counties, which now have little control over their cities, would be forced to work out decision-making arrangements with them and be strengthened thereby.

The second general approach available to states and urban areas to achieve unified decision-making would be to raise all the key decisions to the state level. This has begun to happen in a number of eastern states and has certain desirable attributes under some circumstances. It is most fully developed in Maryland, but the trend is evident in Massachusetts, New Jersey, New York, and several other smaller states.

The Maryland Department of Transportation has available to it a trust fund for all modes and is in fact the owner and operator of the Baltimore transit system. There is no longer a separate highway commission. Massachusetts has not achieved such a high degree of centralization, but the Metropolitan Boston Transit Authority is a state agency, as is the Massachusetts Port Authority, which operates the sea and air ports and a bridge, the Turnpike Authority, which operates tollroads and 2 tunnels, and the Metropolitan District Commission, which operates a number of major scenic highways, among other things. All of these are somewhat loosely organized within the state department, but each continues to have its own board.

Maryland and Massachusetts are both states in which there is a single dominant metropolitan area entirely within their borders. In the case of the latter, the core city of that metropolitan area also happens to be the state capital. Although not formally the state capital, Baltimore houses much of the Maryland state bureaucracy and, in any event, is only a short distance from Annapolis. Both states are among the most urban in the nation, and in both instances their major metropolitan areas represent about half the population of the whole state. Under such circumstances, something rather like a city-state is developing and will clearly continue to do so. On a smaller scale, both Delaware and Rhode Island are evolving in a similar way. In any of these states, one could reasonably argue that strong metropolitan institutions would duplicate and compete with state institutions. For somewhat different reasons, both New Jersey and Connecticut are also moving in the direction of a stronger state role in transportation and planning. Here the logic seems to be the opposite of that in Massachusetts and Maryland. In neither of these highly urban states is there a major dominant city; both states contain large suburban areas attached to out-of-state centers, as well as numerous smaller urban areas. Here, too, with urbanization and fractionated government, only the state has the potential capacity to direct major urban programs like transportation.

The following are major deficiencies facing states as they consider more active involvement in urban transportation decision-making.

1. Few states have moved very far toward meaningful statewide comprehensive planning. As a result, state transportation plans and programs seem likely to continue to be functionally oriented rather than based in broader state or urban area objectives.
2. Unlike councils of governments and local governments, the states frequently do not have a wide array of programs in urban areas that are impacted by transportation,

and that would provide natural spokesmen for such interests within the state government. Those interests more commonly find their official spokesmen in local governments.

3. No states have any effective power over land use in urban areas. Indeed, the thought of states assuming such powers would be considered very radical in many if not most states.

4. The transportation capability of most states remains heavily highway oriented. This is changing in some places, but, in many, if not most states, urbanites strongly distrust their departments of transportation as being handmaidens of the highway lobbies.

Most of the states mentioned above are places in which governors have increased their powers considerably in recent years. There is no question that this solution can only be workable or desirable where that is the case. The governor, in states such as those mentioned, is the only chief executive the metropolitan areas have; thus, it can be argued he is representative. If he has gained control over his formerly autonomous (and often legislatively controlled) highway agency and transformed it into a multimodal transportation department answerable primarily to him, then he has demonstrated the needed "political muscle." With reorganization, he may also have asserted stronger controls over other state agencies and should thus be able to draw on whatever technical skills may be available there to evaluate transportation programs with respect to their nonengineering impacts. Furthermore, there is conclusive evidence that urban state governors have recently greatly expanded the planning and managerial capability of their own immediate offices to thus ensure greater coordination of programs.

To summarize and conclude, we have argued that effective coordination of urban transportation programs with other goals of metropolitan areas requires that comprehensive institutions exist not only for long-range planning purposes but also for implementation of plans. The enforcement of agreed-on priorities is an essential element of the planning process.

Further, we have argued that both kinds of decisions must be made by the same institution and that, to be effective, that institution must have "political muscle" (power), must have the requisite technical skills, and must have legitimacy (i.e., representativeness). The latter is particularly important because of the problems inherent in long-range planning in U.S. metropolitan areas; the body that makes the plan and sets the priorities must be capable of sensing changes in public attitudes requiring revision of those plans and programs.

Given the importance of this last point, it has been concluded that in most places the most desirable path to follow to achieve the above objectives is to strengthen the present councils of governments so that they have sufficient authority to enforce their transportation plans and decisions. With only limited exceptions, states should delegate their own present decision-making power relative to highways to the councils, but conditional on the latter's capability to act. Any action to strengthen the councils will have to come from the state.

Although this appears to be the best solution for most urban areas, there are a few places—mostly small, highly urbanized states with no more than one major metropolitan area—where the state and not a council can do a better job and can also meet the legitimacy requirement reasonably well. In these places, the elaborate trappings of metropolitanism may be not only unnecessary but unworkable.

Most states and their urban areas are at something like a crossroads on these decisions. Both the transportation-department and the council-of-governments movements are well advanced. It is hoped that the values to be derived from each are well understood and do not lead to competition for the power to make key urban transportation decisions.