

federal transportation subsidies, defining them as expenditures net of user charges. The gross amount of subsidy is really not a very important figure in comparing modes. Building highways, for example, is expected to require a much larger dollar expenditure than providing transit services; the same dollar expenditure would be proportionately very large in mass transit. For this reason, CBO has tried to standardize the estimate of

subsidies by comparing the subsidy amount with the industry's revenues. On this basis, mass transit receives the second largest federal subsidy after that of the National Railroad Passenger Corporation. So transit commands a fairly large federal commitment and, judging from past standards, there is a good chance that that commitment will grow.

Cost Allocation, Forms of Aid, and Fund and Administrative Structures

David B. Walker, Advisory Commission on Intergovernmental Relations, Washington, D.C.

All three levels of government currently have major roles in transportation. The state and federal levels appropriate approximately equal amounts of money for transportation (all forms combined). Local units, including special districts, provide about two-thirds as much as either of the other levels. Yet, after funds have been transferred from one level to another, the states emerge as the big spenders. The states alone spend about half of all public transportation funds, local units spend a little more than one-third, and the federal government spends less than one-quarter. The magnitude of these shifts (shown below) make plain the great significance of intergovernmental assistance programs in transportation, especially the federal aid programs.

Level of Government	Amounts Appropriated (\$000 000s)	Amounts Spent Including Funds Transferred From Other Levels of Government (\$000 000s)
Federal	9 147	4 062
State	10 078	12 613
Local	6 675	9 225
Total	25 900	25 900

This expenditure pattern differs greatly for individual modes of transportation. The federal government has a major role in financial assistance to highway programs and substantial direct involvement in airports and water transport. State governments directly provide a pre-dominant proportion of all highway expenditures. Local governments bear most of the funding responsibility for mass transit and virtually all for parking. Federal and state intergovernmental aid is highly concentrated on highways. As recently as 1971, highways absorbed more than 95 percent of all federal and 98 percent of all state transportation aid. In more recent years, however, the federal government has begun to expand greatly its funding of mass transit, as have at least 13 states.

As financial assistance becomes more balanced among different modes of transportation, the systems themselves may be better balanced, but financial decision making will be more complex. Urban governments are seeking flexible funds that can be applied as needed to the various modes for operating or for capital purposes. Flexibility is increasing, but the question of who must approve transportation project expenditures has not been fully resolved. Not all federal urban transportation aid

is channeled through the states, and some projects require concurrence on all four levels (local, regional, state, and federal) before they can be undertaken. The federal government seems anxious to devolve much of the decision-making authority onto the shoulders of local elected officials working through their official regional planning bodies, but many state and local officials are not sure they want to trust regional bodies with this much authority.

Three major types of questions about intergovernmental transportation financing are unresolved:

1. What is the proper allocation of urban transportation costs and responsibilities among the various levels of government, and what should be the source of funds to meet these costs? How should cost-sharing and grant-distribution formulas be designed? How could the yield from existing tax sources be improved? What new taxes could be enacted?

2. How flexible should urban transportation money be? How should transportation trust funds be redesigned? What should be the purposes and scopes of transportation grant programs?

3. How much local and regional, as opposed to state and federal, control should be exercised over spending urban transportation funds? Who are the appropriate grant recipients? What should be the relationship among different classes of recipients?

These are difficult questions that deserve examination in detail.

ALLOCATING URBAN TRANSPORTATION RESPONSIBILITIES AND FUNDS

Federal concern with urban transportation is relatively new. Until the 1960s, federal programs were largely concerned with long-distance transportation systems, and the cities provided local road systems and franchised private transit operators and taxis to provide public transportation in their communities. After World War II, congestion on local streets began to grow serious, and private transit companies began to fail because they could not compete with automobiles. Local governments faced greater highway burdens at the same time they assumed the burden of operating public transit. In most cases, the local financial base

was not sufficient to meet these needs; state governments, traditionally reluctant to become involved in urban problems, supplied little aid. The federal government therefore stepped in to fill the gap. The flow of transit funds from the federal government, which began in the 1960s, became financially significant by the early 1970s.

Thus, the roles of the federal, state, and local governments have been undergoing major changes. Sorting out the roles has heavy pragmatic and political overtones, but the Advisory Commission on Intergovernmental Relations (ACIR) has proposed certain criteria to help establish proper roles for different levels of government; these are

economic efficiency, fiscal equity, political accountability, and administrative effectiveness. Taken together these characteristics suggest that functional assignments should be made to jurisdictions that can (a) supply a service at the lowest possible cost, (b) finance a function with the greatest possible fiscal equalization, (c) provide a service with adequate popular political control, and (d) administer a function in an authoritative, technically proficient, and cooperative fashion.

Of course, governmental functions and activities often are not assigned totally to one level or another; shared roles are typical in the American federal system.

Effective and efficient transportation requires coordination among the different modes, geographic systems, and movements of goods and people. There is also a need to coordinate transportation with community features and vice versa. Transportation influences land-use patterns, environmental quality, economic development, social mobility, energy consumption, and other costs, and these in turn influence transportation patterns. Equity requires that those who will be paying for transportation, both directly and indirectly, should participate in the decision making.

Transportation in an urban community involves several types of decisions: planning transportation facilities and services; deciding which plans should be carried out, when, and by whom; financing approved projects; constructing and maintaining facilities; and equipping and operating services. The job of government is to see to it that appropriate agencies and levels of government are assigned to take care of all of these interrelated tasks effectively, efficiently, accountably, and equitably. Unquestionably, that is a tall order.

In 1974, ACIR evaluated the then existing planning, financing, and implementation responsibilities for the nation's urban transportation (1). It found a need for substantial new responsibilities and authority to be placed at the areawide level in both metropolitan and nonmetropolitan areas. Particularly needed was new authority at this level for linking planning to decision making, for areawide financing, and in some cases for implementing transportation plans. This authority should be limited to providing areawide transportation system facilities and services; the other levels of government should retain their present authority over statewide, interstate, and purely local transportation systems.

In order to assure compatibility among systems at each level, each geographic jurisdiction responsible for a system at its own level should also have an advisory role with respect to other systems connected with it. The responsible level of government would initiate, plan, allocate funds for, and assure the implementation of its own system; resolve inconsistencies between its own system and those of lower levels of government; and advise higher levels of government about inconsistencies between its system and the larger ones. States have the power to legislate these relationships among local, regional, and state levels; at the federal level, condi-

tions in transportation grant programs would be used to help achieve these ends.

Local governments currently rely on state and federal sources for 20 to 30 percent of their transportation budgets, and most regional bodies rely almost entirely on intergovernmental grants or on revenues generated by fare boxes, toll booths, or other user fees. Local government revenues are inadequate to meet their needs, and regional bodies seldom have taxing authority. State law could ease these revenue restrictions by lifting specific limitations on the use of existing tax sources or by allocating new revenue sources to these levels of government.

If transportation system responsibilities were matched to the geographic reach of the responsible jurisdictions, the tax base in each jurisdiction would theoretically be more or less adequate to cover its costs. Local governments would be expected only to pay for local facilities, regional bodies for areawide facilities, states for statewide systems, and the national government for all interstate costs. The problem is that the lower levels of government have less taxing authority and the systems responsibilities of each jurisdiction are ill defined. Intergovernmental grants are therefore essential.

The way in which grant funds are distributed is important. State aid formulas tend to return funds to local communities on the basis of where they were collected. Local contribution formulas for providing funds to areawide agencies tend to use such factors as population, route distance, number of rapid transit stations, and projected ridership. Whether funds are flowing upward or downward from local governments, it is important that the flow be reliable. Established formulas with well-known factors that feed out funds from an earmarked source are more reliable than appropriations from a general fund for project-by-project approval on a competitive basis. However, even earmarked sources will need to be reevaluated and adjusted from time to time in order to maintain program levels in proper relation to other governmental priorities.

At the federal level, grant funds—other than those for specific projects—generally are distributed on the basis of one or more of the following principles: (a) equal sharing among jurisdictions on either a unit basis or a per capita basis, (b) the need for services, (c) the actual level of services or costs, and (d) fiscal capacity (or financial need).

Until recently, the federal transit programs have been approved on a project-by-project basis only, rather than by allocation formulas, but now such formulas apply to some programs. Deciding which measures of program need should be used has generated substantial controversy. Factors proposed in these debates include urban population, urban density, and existing ridership. Obviously, these options would yield very different results.

The tendency in most grant allocation formulas has been to use a variety of factors, thereby muting the effects of any one of them. Often, the factors used are not very precise, although they may be the best currently available. In many instances, the design of these formulas remains more an art than a science. Thus, funding formulas do not always direct intergovernmental aid precisely to where it is needed. Nevertheless, there is little alternative but to use the present formulas with the hope of improving them over time as data sources are developed and as the age of computerization matures.

The point to keep in mind amidst all this juggling of program responsibilities and funding allocations is that the two must balance. If any level of government is given more program responsibilities than funds, it will fall short of meeting all of its responsibilities.

As of 1975, the federal government offered 49 trans-

portation grant programs to state and local governments; 40 were for ground transportation, and most of these were for highways. All are categorical grants, narrowly drawn for quite specific purposes, and generally speaking they cannot be used for any other purpose. This makes it very difficult for state and local governments to pursue comprehensive transportation objectives.

Endless regulations accompany each program, and they differ from one program to the next. Simply becoming familiar with the regulations is a full-time job. On top of these specific regulations, there is a layer of general requirements that apply to virtually all federal grants—but slightly differently in each case. These have to do with equal opportunity, the environment, employment conditions, relocation, and the like. The list continues to grow year by year as national policy objectives expand.

There have been many proposals in recent years for consolidating some of the transportation grant programs, creating a single fund for at least the urban transportation programs, or at least bringing common features into separate but related programs. Grant programs have some flexibility now—some highway funds may be transferred to transit purposes, some transit construction funds may be used for operations, or a complex project may be funded through two or more related grant programs—but the larger goals of consolidation and simplification remain largely unmet.

A great deal has been done to establish and perfect comprehensive land-use and transportation-planning processes in every metropolitan area throughout the nation. But implementing those plans is a highly complex task that requires juggling state and local funds and the multiple federal aid sources into a cohesive program. This assignment has been given to metropolitan organizations that are essentially consortia of local governments and state transportation agencies that lack any real implementation powers of their own.

ACIR has recommended that all ground transportation programs for systems of less than statewide stature be consolidated into a single regional transportation block grant. This grant could be used for any transportation project or program of areawide significance in metropolitan and nonmetropolitan regions, or it could be passed through to local governments for projects and programs having only local significance. The funds could be used for any mode of transportation not supplied through statewide and interstate systems. They could be used for any mixture of planning, construction, operation, maintenance, beautification, safety, or other aspects of a transportation program. This would simplify immeasurably the present hodgepodge of programs and ease substantially the task of metropolitan and regional planners in implementing coherent transportation systems. ACIR has further suggested that several of the existing transportation programs at the state level be consolidated.

There are some objections and disadvantages to program consolidation. The specific purposes of individual programs might no longer be met so directly. Each mode of transportation, type of clientele, and feature of the overall system would have to be rejustified continually in the planning process to assure its survival. On the other hand, this provides the positive opportunity to make sure that only essential elements of the transportation system and those that are most cost-effective will survive. Money would not go unused in one category, while high-priority needs go unmet in another.

Transportation planning and management capabilities below the federal level have developed sufficiently so that they can be trusted with a substantially greater

amount of flexibility in using federal transportation grants to meet the individualized needs of the states and regions. Further, it is highly questionable whether Congress really knows the relative priorities of each state and each region for each mode of transportation and each type of safety and beautification measure. But these are the judgments Congress now makes in funding the 40 ground transportation programs under the present grant system.

ACIR has recommended that programs to be merged and funded by block grants should be those that are, or will be, (a) closely related in terms of the functional area covered, (b) similar or identical with regard to their program objectives, and (c) linked to the same type or types of recipient governmental jurisdictions. Block grants are not well suited to research, demonstration, or experimental programs or to programs aimed at specific goals of national policy that the federal government intends to prescribe uniformly; categorical grants are better for these purposes.

Block grants are the preferred instrument when:

1. A cluster of functionally related categorical programs has been in existence for some time;
2. The broad functional area to be covered is a major component of the recipient's traditional range of services and direct funding;
3. Heavy support is intended for those recipient services that Congress determines are of national significance;
4. No more than mild fiscal stimulation of recipient outlays is sought;
5. A modest degree of innovative undertaking is anticipated;
6. Program needs are widely shared, both geographically and jurisdictionally; and
7. A high degree of consensus as to general purposes exists among Congress, the federal administering agency, and recipients.

Guidelines for developing proposed block grant legislation should include the following.

1. Program objectives and priorities should be clear and precisely stated.
2. The program should encompass a substantial portion of total federal aid for providing services and facilities in the functional area involved.
3. Grants should be authorized for a wide variety of activities within the functional area covered, and recipients should be given significant discretion and flexibility in developing and implementing a mix of programs tailored to their needs.
4. Funds should be distributed on the basis of a statutory formula that accurately reflects program need and that is consistent with the purposes and priorities of the legislation.
5. Discretionary funds, if authorized, should account for not more than 10 percent of total appropriations.
6. Eligibility provisions should be specific, favor general-purpose units of government, and reflect their servicing capacity, legal authority, and financial involvement.
7. Matching funds, if called for at all, should be fixed by statute at a low and preferably uniform rate for all aided activities.
8. Planning, organizational, personnel, paperwork, and other requirements should be kept to the minimum necessary to ensure that funds are being spent in accordance with the program's authorized objectives.
9. The federal administering agency should have

authority to approve, within a specified period, recipient plans and applications for conformance with legislative objectives and also to evaluate program results.

10. Assistance should be provided to recipients, where needed, to enhance their ability to effectively administer the program.

Recent case studies of four of the five block grants currently authorized by the federal government have shown that implementation varies from the norms assumed at the national level when the program was enacted. This is inevitable, particularly in the first few years of a program, when recipients are still discovering how to make best use of the opportunities provided by the program's flexibility. Variation of this sort is not sufficient reason to return to categorical grants.

Block grants should be administered through the states if the states demonstrate that

1. Appropriate policy, organizational, planning, and procedural arrangements have been established to ensure the efficient and effective use of federal aid;

2. The personnel to be assigned to block grant administration possess requisite planning, managerial, and other skills;

3. There is a substantial financial commitment to the functional area covered by the block grants; and

4. The state is willing to assume at least half of the local matching share where matching is required and where local units were previously the major recipients of federal aid in the functional area covered.

If a state does not meet these criteria, block grants should be provided directly to general-purpose units of local government that individually or in combination are eligible for financial assistance. The states, however, should be authorized to apply for aid on behalf of jurisdictions that are not otherwise eligible for entitlement funding.

Where block grant legislation encourages or requires the establishment of regional planning units (as is already the case for urban transportation programs), the statutory provisions should specify that, to the maximum extent practical, the boundaries and organization of existing areawide general-purpose planning bodies be used.

If grant consolidations are to take place, some reform of transportation trust funds and earmarked revenues is needed. At the federal level, this means changing the highway trust fund (which is based on gasoline taxes) to a multimodal transportation trust fund. Although a small portion of this highway fund can now be transferred to transit projects, this fund is largely devoted to highway programs. The federal government's transit programs have been funded almost entirely from the general fund.

Consolidated intermodal grants would require abandonment of the trust fund source or development of a system similar to that of Maryland's multimodal transportation trust fund. Revenues from the gasoline tax, motor vehicle registrations, waterports, airports, and highway tolls all flow into a single trust fund, which then makes appropriations back to the modal programs according to needs determined by intermodal planning and programming. Thus, the source of transportation funds does not automatically predetermine expenditures for the individual modes.

State aid programs are also very heavily based on earmarked tax sources and narrowly restricted expenditures. If changes in the federal grant system are not mirrored by parallel changes in the state funding that matches the federal programs and provides supplemental

expenditures, gains made at the federal level in program simplification and flexibility can be lost at lower levels. Similarly, local government and special district transportation revenues and appropriations (including the newer metropolitan transportation taxes) should also be free of narrow limitations on their use.

REFORMING TRANSPORTATION ORGANIZATIONS

Two basic organizational issues face the nation today in the field of transportation. One is establishing intermodal departments of transportation at the federal, state, and local levels. The other issue is establishing and strengthening intermodal regional transportation planning within general-purpose regional planning bodies and linking it to areawide implementation processes.

The federal government and more than 30 of the states now have departments of transportation, and a few such organizations have been established in local governments. These departments vary greatly in the scope of their modal responsibilities and in their forms of organization. The U.S. Department of Transportation still maintains modal administrations in its basic structure and has relatively little planning, policy-making, and intermodal funding capability at the secretarial level. With this structure, consolidated intermodal grants would be awkward to administer.

There is an obvious need to coordinate transportation policy with other policies and programs of government. The comprehensive planning framework on which most proposals for coordinating related programs are based is relatively well developed at local and regional levels, but it is found in recognizable form in only a handful of states, and it is totally lacking at the national level. At the state level, ACIR has recommended that basic policies prepared by an intermodal state department of transportation be subject to approval by the governor after review and comment by the state planning agency and other affected departments and agencies within the state. This would include all proposals for federal-aid funding, as well as those using only state funds. Similar concerns should be addressed at the local level.

The 1962 Highway Act required continuing, cooperative, and coordinated land-use and transportation planning in all urban areas having a population of 50 000 or more. This planning process involves the local governments in the region and the state agencies administering federal transportation aids in a common effort to plan and program the use of transportation funds in such regions.

The regional planning organizations established to carry out this process have flourished. Largely by using federal funds, they have developed competent staffs and produced numerous plans; recently, under new federal guidelines, they have begun to translate their general plans into specific short-range transportation improvement programs and transportation system management programs. In about three-quarters of the cases, the regional planning organizations designated for transportation planning also are the ones designated for comprehensive community development planning under programs of the U.S. Department of Housing and Urban Development and federal-aid review and comment roles under the auspices of the Office of Management and Budget. The designated regional planning organizations for urban areas are responsible for federally assisted planning in the mass transit and airport programs as well as in the highway program. Much of the work of these organizations is done under joint planning regulations that govern the use of both federal highway and transit funds. At least on paper, the urban regional planning

organizations have the most coordinated planning process found at any level of government.

ACIR has recommended even further strengthening of these regional bodies, as well as measures to team them with regional implementation authorities, with a regional tax base for transportation, and with existing state and local transportation implementation and regulatory bodies. The recommendations treat nonurban regions the same as urban ones, even though federal-aid programs do not. Local officials in rural areas have not been given as formal a role as urban officials in helping to plan and decide project priorities within their areas. The proposed regional block grant for ground transportation would bring these rural officials into the regional planning and program-funding process.

The Federal-Aid Highway Act of 1976 called for a thorough reevaluation of urban system planning and funding processes. The Urban System Study (2) thoroughly documents the current status of regional transportation planning and decision making in the nation's urban areas. The regional planning process for transportation is part of a much broader federal sponsorship of regional approaches to regional problems. Federal-aid programs in the areas of community and economic development, land use, housing, environmental protection, a variety of social services, and protective services (fire fighting and law enforcement) also take this approach.

These programs were reviewed by ACIR in 1977 (3). Several of the regional programs have been interrelated through interagency agreements that recognize common planning requirements, and about half of the programs in any given geographic area are administered through a single planning organization.

ACIR has recommended additional federal action to bring all of these federal programs together at the regional level. A bill that would do that is pending in both houses of Congress (S 892 and H.R. 4406). Transportation programs would benefit from this coordination effort as much as, if not more than, other federal-aid

programs because of their widely recognized interrelationships with virtually all other development and public service programs.

CONCLUSION

The Intergovernmental Relations Committee of the Transportation Research Board is in the process of building a consensus among its members on basic intergovernmental principles. In this process, it has developed a work sheet for helping to distinguish federal, state, areawide, and local transportation responsibilities. The work sheet provides for assignment by percentage of various planning, programming, and implementation responsibilities among the various units of federal, state, areawide, and local governments already involved in transportation and transportation-related programs.

Changing the roles and relationships among the different levels of government and the different departments, agencies, and authorities at the same level is a highly controversial activity. Consolidating major grants, establishing effective intermodal departments of transportation, and further strengthening regional planning organizations will require thorough justification and take time and substantial adjustments in traditional practice.

REFERENCES

1. Toward More Balanced Transportation: New Intergovernmental Proposals. Advisory Commission on Intergovernmental Relations, Washington, D.C., 1974.
2. Urban System Study. U.S. Department of Transportation, Dec. 1976.
3. Regionalism Revisited: Recent Areawide and Local Responses. Advisory Commission on Intergovernmental Relations, Washington, D.C., 1977.

Cost Allocation and Funding Structure for Transit

David L. Graven, Holmes, Kircher and Graven, Minneapolis

From the standpoint of general government, the development of metropolitan councils and semidependent districts is very significant. Transit planning should not be in the hands of transit operators. If urban planning is to be controlled, there cannot be separate planning by the transit operators, the airport people, and the highway people. The development of separate, isolated plans has been compared to a feudal system, and the Urban Mass Transportation Administration (UMTA) today is a classic feudal system. It is not concerned with transportation; it is concerned with transit. To be involved with transportation is to be involved also with health, housing, and many other areas. Funding transit, like funding parks, often involves displacing the elderly and the poor.

Planning bodies must involve generalists. In the transportation area, this may involve combined planning by the transit system and the highways. It is tough to do, because federal and state governments become involved in what is essentially a metropolitan issue, but this can be worked out.

The Twin Cities area is often treated as a special case, because it was able to develop a regional plan. It is not really different from most other metropolitan areas of similar size. It was a difficult political job to get regional planning done within the state; among different state jurisdictions, regional planning seems impossible. But it can be done.

There are a lot of areas around the country like the Twin Cities that basically have only one major city.