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.

When the regional government was formed, the Twin Cities did not follow the Toronto model; it did not seem necessary to put everyone in the same uniform. A lot of things do not have to be metropolitan, but transportation is metropolitan. There must be a geographical base with a high degree of concentration in one place, and that is what sold the legislature on the idea. The state legislature is the key to the power in the metropolitan area.

Following the principle that you do not let the operators plan, the Twin Cities' metropolitan council does all the policy planning. The operating agents—the sewer board, transit commission, airports commission, parks and open space commission—do the implementing. There are overlaps, and there are tensions between the policy makers and the implementers, of course, but that is where the issues surface publicly. Policy makers should not wear two hats. People who are elected out of small jurisdictions cannot be expected to make broad regional decisions.

Finally, there must be a decision-making mechanism. How are regional decisions made in the Twin Cities? It is very simple: the roll is called at the metropolitan council, a vote is taken, and the majority wins. That is what happens, unless a federal judge intervenes.

How does this affect the struggle between transit and highways? There has been a major fight over the form of transit. Transit now is defined in our area as anything that involves more than one driver and one automobile. There is a structural problem because the transit commission, which is committed to building a rail system, is in charge of paratransit. The problem is how to make people innovative. A new airport or subway can be blocked, but you cannot tell people to be innovative and creative, and that is what paratransit requires. The operating agencies should not have to fund things that are basically in competition with the form of transit they are supposed to be creating.

The novelty has worn off transit in Minnesota in funding and in the legislature. There was a big fight between rail and buses, and the transit commission fought the bus system. There was a tremendous service expansion, but it went from being a no-deficit operation at the time it was taken over 7 years ago to being an operation with total expenses for last year of $50 million, only $18 million of which comes from the fare box.

It became a matter of ideological differences in Minnesota. The struggle happened at the same time that the freeways were going through the liberals' suburbs; this made it a political fight, because highways were "conservative." Transit, meanwhile, was expanding service for commuters, and this has produced a tremendous deficit. The legislature has had enough so it has now gone to something called performance funding. The difference is that the legislators will not automatically fund the deficit each year—or at least they say they will not. They will only pay a subsidy based on ridership.

There are many more buses than are needed, and there is no rail system; now UMTA funding will provide a people mover in downtown St. Paul. They give you the Saint Bernard, but you have to worry about the cost of the dog food. And that is what the state legislature is waking up to: the cost is quite high.

Neal Potter, Montgomery County Council, Rockville, Maryland

It is desirable to coordinate the different federal programs, including those in the heavily related areas of transportation, energy, and environment. There is a very serious question whether a nation that is short of energy should be subsidizing the use of energy in any of three large fields: space heating, manufacturing, and transportation. But we are heavily subsidizing the use of energy for mass transportation, as well as for automobiles.

Our subsidies to the automobile are enormous and absurd. We not only fail to levy charges on the automobile to offset its heavy impacts on the environment, but we are also now subsidizing the price of gasoline and oil. The cost of gasoline at the pump is far below the cost of imports from abroad; price controls force a mix that sets the price far below the marginal cost. The cost of present levels of energy use is also very high in terms of national security.

In the face of an overall policy that cannot long endure, it is certainly desirable to save some energy. Therefore, the policy of subsidizing mass transit makes sense. Along with this subsidy, however, perhaps we should make the automobile pay its full cost, so that transit would be competitive at a much higher fare-box price. This would also have powerful impacts on land-use distribution in our metropolitan and rural areas.

One way to provide some extra support for mass transit and to penalize automobile use is by raising gasoline taxes. A high gasoline tax is not easily levied by local governments because of the competitive effects, but it could be levied by regional governments in metropolitan areas. Since there are few regional governments, the states and the federal government levy the gasoline tax. The gasoline tax should be used to promote the economical use of energy and the protection of the environment through grants to regional or local transit authorities.

The principal source of local revenues from the automobile are parking charges and parking taxes. In view of the costs the automobile imposes, the lack of such a tax amounts to subsidizing the automobile. This underscores the absence of an intelligent policy on congestion, environment, and energy. In the Washington, D.C., area, only the District of Columbia has begun, and only in the last 3 years, to levy a tax on parking. It still, however, has parking meters that grossly undercut the private competitive parking on which D.C. levies the tax; there is also a great deal of free street parking with no meters at all. It is the beginning of an intelligent policy, but it has a long, long way to go.

The transportation authorities are said to be the beginnings of regional government. Not so for the Washington area. The Washington Metropolitan Area Transit Authority (WMATA) has no bonding or funding authority, and it is constantly in the throes of extreme financial difficulty. It was established by compact among the District of Columbia, Maryland, and Virginia and the federal government, creating a contract that basically has

no contingency clauses. Because the dollar value of the construction has approximately doubled in the long period from the original conception to the present, the original set of obligations is essentially in shambles, and the ability of WMATA to alter the situation is negligible. It is a matter of grant negotiations among a set of parties, none of whom knows where it is going, over a contract whose terms have become obsolete.

If we are going to levy adequate gasoline taxes and put the money where it could contribute to national solutions, it would be nice to have a coordinated, consolidated federal grant program. The thinking of the Advisory Commission on Intergovernmental Relations in these respects is to be highly praised and pursued, but it creates the situation of the grantor having control without knowing what he is doing. There is general agreement among those who struggle in county governments that the problem is that, on one hand, mandated programs often have no accompanying funds and that, on the other hand, money is often granted without adequate analysis and control. A guiding principle should be that control over the spending of money should be in the same hands as those responsible for raising it, and those who know the pain of raising it ought to have the pleasure of spending it. These functions are divorced in federal grants, categorical or otherwise.

On the other hand, the federal government is usually not equipped to make the decisions, because Congress never allows the government agencies adequate time for gearing up and becoming informed. So either lack of administration or hasty administration leads to very bad decisions. If we are to have these major grant programs, we should have much heavier administration and research on the part of federal agencies to show them what they are doing.

One warning is in order. The establishment of a coordinated or controlled program of grants has to be phased in. There are, after all, enormous commitments, expectations, and expenditures in process. The Washington Metro system is a prime example of this. The efforts of the Secretary of Transportation to reevaluate Metro when it is half done are extremely counterproductive in several respects. The delays and uncertainties and the consequent escalating costs and undermining of the original assumptions on which the system was designed can be more expensive than proceeding with the original system.

Lloyd A. Rivard, Committee on Public Works, U.S. House of Representatives

The metropolitan planning organization is a new organizational form that emanated from, but was not directed by, the legislation on highways. There was a feeling among many urban-area officials that they needed more money for urban-area planning. A lot of the funds came from the 1.5 percent highway planning and research funds in the highway program and, since the Interstate system was well funded, 1.5 percent was a lot of money. But the planners still did not have enough money, so Congress granted another 0.5 percent that was designated for use by metropolitan planning organizations.

That term was picked carefully to fit all the organizations that were in existence. The intent was merely to hand the planners some more money, but the result was that the administration set up a whole new set of ground rules for planning organizations in all urbanized areas. These rules transferred a lot of the responsibility for decision making and changed the composition of the planning organizations in urbanized areas; this is in large measure the reason for the lack of progress on the urban highway system. It is more difficult to get local decisions than ever before.

It has been suggested that guidelines for block grant legislation should include the following.

1. The program objectives and priorities should be clear and precisely stated.
2. The grant should encompass a substantial portion of total federal aid for providing services and facilities in the functional area it involves.
3. Grants should be authorized for a wide variety of activities within the functional area covered, and recipients should be given 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 needs.

Categorical grants include the bridge replacement program, which is funded at $180 million/year. That is allocated among the states by the Federal Highway Administration; this may build one bridge per state. Since bridge replacement is considered to be an area of high priority in the highway program, there is a current proposal to increase the funding to $2 billion/year. That program will probably go through because it is the intent of Congress to improve 105 000 functionally deficient or structurally obsolete bridges. It can authorize $2 billion to get something done in that category and then ask the states in 2 years, "What have you done?" If that money were allocated in a block grant, the states might have spent it on transit, aviation, or something else they felt was more important than bridge building. These things could be left to the states, but controversy among congressmen normally reflects the feeling of their constituencies, and that is what they should be representing.

The background of the 1974 Transit Act and how section 5 came about is an interesting story. In 1973, the Banking and Currency Committees of both the House and Senate had jurisdiction over mass transit. They proposed a bill for operating subsidies only—a 2-year bill providing $400 million/year. It passed the Senate before January 1973; it passed the House, too, but only by two or three votes, and these votes would not carry it through the conference process. Through an oddity of jurisdiction, the administration sent up a bill combining the transit and highway programs. Title 23 was so greatly revised that jurisdiction of the whole package fell to the Public Works Committee, which held hearings all over the country and again in Washington. That resulted in a bill for a 6-year program that would provide $20 billion. In the meantime, President Ford had said he would not approve more than $11 billion, so that figure was adopted.

The section 5 operating subsidies were passed by about 20 votes, because a lot of rural highway votes were swapped for the mass transit bill. So the House passed one bill while there was another bill going through the conference process. The House bill had the program, and the committees' bill had a $400 million subsidy. The program was rewritten in conference; a lot of adjustments were made before it could be passed on the floor of the House. There has been a lot of sentiment for changing funding under section 5 to a service formula. The major transit people are looking for a revised formula that favors the 25 largest cities.

It is fine to think in terms of the community objectives of public transportation, but it is necessary to keep realistic expectations. Those things that are in the realistic range have got to be brought into any consideration of the future of transit. For example, you cannot get money for the transit program by attacking the highway program or by attacking automobile subsidies. This year's chairman of the Subcommittee on Surface Transportation is highly transit oriented, but he is also highway oriented. He has introduced a combined highway and transit bill with three titles, the first one dealing with highways, the second with highway safety, and the third with mass transit, and they are going to remain tied to one bill.

Arthur Baurer, Office of Research, California Senate, Sacramento

A good part of the role of the Office of Research is to translate technical facts for politicians and to translate for the technocrats the political process and the tradeoffs that are necessary to get the kinds of things that may be beneficial to the public. Our political system is federal, and the states are important institutions with their own kind of sovereignty. Local governments have varying degrees of autonomy. Politicians at all three levels have something in common—their constituencies. This is an important factor in such things as urban transit.

One of the things that is common to this broad-based constituency is the feeling that there is an entitlement to mobility. This consensus has a great deal to do with funding the various ways of achieving mobility. In the federal government, that has been basically the highway trust fund; highway trust funds also are frequently found in state governments. This is not some evil kind of construction. Economists may say it is irrational, but it represents a very rational decision from the point of view of politicians because it is based on a consensus of opinion that they do not want to reencounter on an annual basis in negotiating differences over conflicting demands on the revenues.

As concepts of mobility change and as the consensus on this concept of mobility is modified, certain subtleties arise in it. One of these deals with the Federal-Aid Urban System (FAUS) program. This program is underrated; it has been abused, and it has not been used correctly in all instances, but it is going to be important.

Santa Clara County, for example, has a population of about 1.2 million and one of the highest rates of automobile ownership per capita in the United States. It has a local expressway program that it financed some years ago through a 0.5 percent local sales tax. The FAUS program came along, and the money is distributed within the county on a fair-share basis, but the smaller cities in the county found it requires too much paperwork. The county government therefore said, "We will buy your FAUS money from you. We will give you 60 cents of state highway money for your FAUS money." And with that FAUS money, Santa Clara County is in the process of trying to buy rights-of-way for either a busway or a fixed-guideway facility for some time in the future.

That was done without any central coordination in terms of a regional program and without the intervention of the state. It was done on the basis of the emerging flexibility in both the state and the federal programs that allows us to achieve certain ends.

Another transportation-related program in the state of California is one that interacts in a rather perverse way with the Urban Mass Transportation Administration (UMTA) program. The origins of this program go back to 1971 to the state's transit subsidy program, which now amounts to about $200 million/year, collected from 0.25 percent of the sales tax. The program is basically a mass transit program for counties that have more than 500 000 people, but smaller counties can use it for highways, depending on whether they have transit or not. If it is used for transit, it covers 50 percent of the operating costs; the remaining 50 percent has to come from other sources. There is no problem for large operators. They simply use that money and all the other money they can get their hands on. For some of the medium-sized and smaller districts, there is a problem; they claim they cannot raise the local matching funds to meet the 50 percent requirement.

The UMTA funds cover up to 50 percent of the operating deficit, provided that the existing level of all other financial assistance remains at least constant. A local area has two choices. It can maximize the section 5 money by increasing deficits or it can convert the section 5 money to capital uses, but in general transit is already overcapitalized.

California is therefore faced with a problem. Since the institution of the transit subsidy program in 1971, there have been two governors who would not increase funding for transportation because they do not think it is high on the public's agenda. But the California public transit industry is facing increasing deficits that will be unfunded in the future. In 1976, a bill was introduced that requires all transit operators in California to recover 50 percent of their operating costs from the fare box. This provision was finally taken out, but the Auditor General of the legislature was asked to look at transit operations and propose some alternatives to control the deficit problem.

The Auditor General had some very specific findings and recommendations. For example, between 1970 and 1976, deficits of the Southern California Regional Transit District in Los Angeles rose from $7 million to $117 million, service distance increased 75 percent, and costs increased 210 percent. San Diego added a considerable amount of marginal service because the state money was available, and some of the operators in the San Francisco Bay area were doing the same thing. The

Auditor General also found in seven sample systems—urban, suburban, and rural—that fare-box recovery varied from 11 percent to 39 percent, whereas the national average at that time was about 54 percent.

It was a bleak picture from the point of view of the legislature. The bill that was introduced tried to deal with this by requiring three basic kinds of audits: a fiscal audit, a performance audit, and a productivity plan. The fiscal audit looks at how the money is being used—whether it is being used as it should be and whether the county treasurers are stealing it. The performance audit uses the same standards that the Government Accounting Office uses for the audit of federal organizations. This audit is done over a 3-year period, with part of the audit done every year. The productivity plan has to be put together by the regional agencies that allocate the money. The transit people could not publicly oppose the bill, but they were upset by it. The unions were very concerned, because they think criticisms of productivity and efficiency are aimed at them specifically. They wanted an advisory committee made up of members of each agency involved. Labor and management both resisted adding transit users to the committee.

The bill is going to be signed by the governor; there is no opposition to it. The program itself is responsive to the public interest. There is no way that the transit industry is going to get money unless it shows some responsibility and some prudent management practices.

California has been a major battleground in the issue of metropolitan planning organizations. Blood has been spilled in Los Angeles, San Diego, and the Bay area and all over the state legislature. The recounting of that battle may be instructive. The goals of regionalism and intergovernmental planning are sensible. But how do you structure the whole process, and do you try to impose the structure nationally on very diverse political systems?

The history of the process goes back to a conference that was held in October 1958 at Syracuse University. Politicians at that conference were talking about intercity or intergovernmental planning. That discussion led to the 1962 Federal-Aid Highway Act. In the mid-1960s, there was a series of such conferences, but the politicians began disappearing from these meetings. This left program managers and planning technocrats from various kinds of agencies. The whole process and the rules and regulations for 1974 and 1975 began to show the effects. The process became based on what is convenient for the bureaucrats rather than on what makes political sense, at least in California.

The Metropolitan Transit Commission, a nine-county regional agency was created back in 1968. In 1975, San Diego became interested in creating a planning and implementation agency to look very hard and very directly at the whole notion of a rail transit system for San Diego. To help the agency along, the legislature gave it control over FAUS funds and over the state subsidy program.

San Diego is a single-county urbanized area, and county government is very powerful in California. Even though it is a relatively small county, it has two very diverse political cultures. The southern county culture is highly urbanized and has a large chicano population and a fairly large black population—a big-city kind of area.

To get the bill through politically, the county was divided along certain boundaries. The bill said that, within the boundaries, this new agency (the Transit Development Board) will plan and operate, if it decides to construct, a fixed-rail facility. It will have access, for the first 5 years without question, to money diverted from the state highway trust fund for rail transit. It will program the FAUS money for the area of its jurisdiction; the original FAUS split within the county was presumed to occur, as it always has, through negotiations among the various cities, the county, and the metropolitan planning organization.

The bill was introduced, and it had no trouble moving through the legislature. But UMTA balked. After the bill was passed and signed, it had to be sold to UMTA. UMTA is not going to stop the money, but it clearly does not fully approve. However, the new plan appears sensible to certain political groups in the local area and, whether or not it works, it should be their decision.

James H. Miller, Pennsylvania Transportation Institute, Pennsylvania State University

The Pennsylvania Department of Transportation (PennDOT) through its Transportation Advisory Committee (TAC) has formed a Mass Transit Fiscal Review Task Force. The TAC was established in 1970 by the legislation that created PennDOT. Its membership represents leaders from the state legislature, the transportation industry, academia, labor, and major industries in the state. The TAC has recently completed several studies related to highway financing. PennDOT has financed the state share of the cost of highways with bonded indebtedness to the point that debt service represents one-third of the total highway budget. Largely as a result of the findings of TAC's highway study, no new highway projects will be started with borrowed funds unless additional revenues are made available to the highway program.

Although highway financing has received the greatest amount of attention, the state's transit program is in similar condition or soon will be. Pennsylvania prides itself in having one of the early, and more complete, mass transit assistance programs. Legislation was passed in 1967 that allowed the state to fund up to two-thirds of the operating deficits of transit systems. Most of this aid has gone to Philadelphia and Pittsburgh, but 20 smaller systems have also received support.

This program has led to support by the state that grew from $9 million in 1970 to $74.2 million in 1975, 1976, and 1977. After 3 years of level funding ($74.2 million), the legislature appropriated $79.2 million for fiscal year 1978. Since section 5 funds became available in 1974 and 1975 the constant level of state funding really did not create a problem until this past year; most of the 13 systems in urbanized areas either cut back service, raised fares, or carried forward unfunded deficits.

Forecasts indicate that Pennsylvania's transit deficits are likely to more than double in the next 5 years, but state assistance is not expected to keep pace. Local

governments in Pennsylvania subsidize transit but not to the extent as in other states. The early and generous state program and later the federal section 5 aid have allowed local governments to hold their share of deficits to about 33 percent of the total. In 1975, the state contributed 55 percent of the deficit funding while the federal share was 12 percent. Nationally, local governments contribute about half the deficit support.

It must be a natural law of government to try to pass the responsibility for meeting increasing deficits to the highest level possible. The local people look to the state for the money, and the state looks to the federal government. Now Pennsylvania has reached the point that local governments are not putting up more money nor the state or federal government, yet the deficit grows.

One of the major issues confronting the task force is who should pay for transit. How much should or can the riders or the various levels of government be expected to pay? One source of additional revenue that might be tapped is the fare box. Several years ago PennDOT was using a standard of 50 percent from the fare box as the guideline in reviewing applications. The guideline now being used is that the fare box ought to recover 45 percent of the cost of operation. The only apparent justification is that this is about where things are now. Philadelphia and Pittsburgh have a slightly higher percentage, which allows them a couple of years to slide down to 45 percent without having to revise the guideline. Some systems recover as little as 20 percent of operating expenses from the fare box.

It has been suggested that the state require the transit authorities to raise fares to match inflation. The state has had some part in fare increases, but a fare level is not specified in written guidelines. Philadelphia and Pittsburgh both have had fare increases in the last year or so because of either direct or indirect state pressure. The state has said it would not put up more money until fares were raised. Interviews with transit authority staff and board members suggest that such state intervention in setting fares is not acceptable to them.

One of the problems in Pennsylvania is that none of the transit agencies has the power to tax. All the money comes from the general funds, revenue sharing, or wherever they can get it. As a result, the local share is not very large and cannot get much larger. One of the proposals before the task force is to allow local citizens to give local governments the power to tax specifically for transit. The problem is that it is unlikely that, given the option, voters in urban areas would vote new taxes. Few of the systems have a good public image, and that is crucial in selling a tax.

One complaint received from transit authorities concerning state funds is their unpredictability. It is a year-to-year appropriation that is determined by the legislature. The federal money is predictable, and the local share can be guessed fairly accurately, but the state money is an unknown until the fiscal year is under way. The program in Pennsylvania is discretionary. The Undersecretary for Local and Area Affairs allocates funds to each authority based on need and other more subjective measures within the amount appropriated by the legislature. There has been talk about using formulas, but that option has been resisted. There seems to be more wrong than right with formulas. A formula could give too much to some areas and not enough to others, causing distortions and other problems.

Another alternative being discussed is combining an incentive package with the basic subsidy. PennDOT cannot guarantee anything the legislature has to pass, but the program could, for instance, attempt to provide 60 percent of a system's deficit, based on need, and then add another 6.67 percent if the system meets certain efficiency criteria. The state would use 8 to 10 efficiency measures; the number of passenger-kilometers per vehicle-kilometer, cost per hour, and cost per kilometer are some of the more standard ones. The values of these measures could be related to a system's own performance, i.e., the change in a measure from year to year, or they could be based on values from the system's peer group.

There has been a lot of resistance to the efficiency incentives for several reasons. How do you know which measures are appropriate? Who is to decide what an acceptable percentage change is? Other shortcomings that have been pointed out include the problem of identifying peer groups or determining whether peer group comparisons are valid. Further, a system may make counterproductive changes just to influence the indicators. If a system really wants to get the highest number of passenger-kilometers per vehicle-kilometer, it will just cut out all the owl service and weekend service. It could be very efficient in one measure and yet not meet the objectives of the system.

In a state like Pennsylvania, where the local governments put up only one-third of the money, how can local areas really expect to have much control over the system? Why should not the state have the right, in combination with the federal government, to tell the system how it should be operated? It is putting up most of the money.

There is a real concern about how to get accountability in a transit assistance program. It is doubtful that orders from above can make a system great; formulas or guidelines cannot make a good system. There are some very good systems, but it is not because of the state or federal governments; it is because of the local people—the management and the board of directors.

To summarize, there are many more questions than answers in Pennsylvania. Transit systems will try to get as much state money as possible, which may not be much more. They may expect a little more from the federal government, but most of the burden will fall on the local government, which will probably lead to additional local taxing power.

Transit has almost come back to its position 20 years ago, when it was privately operated and trying to break even. Now transit is trying to break even, not on 100 percent of cost but 25 or 50 percent of cost. Systems are now cutting service and raising fares to balance budgets. If this is the future of transit then maybe we ought to shut it down; that is the fastest way to minimize losses. Pennsylvania is not going to stop funding transit, but it has the serious problem, as other states do, of trying to cover an ever-increasing deficit and doing it very quickly.

Eric W. Beshers, Office of Transportation Economic Analysis, U.S. Department of Transportation

The basic problems in this business of financing mass transit are political and institutional. It has been observed that all the governments want to kick the responsibility up to the next higher level. This is because it relieves them of the very uncomfortable necessity of confronting the unions and the transit users and having to hurt somebody. The problem is that federal money cannot go on forever either. From an academic, nonpolitical point of view, revenue sharing is certainly an ideal answer for this sort of thing.

Discussions about transit operating subsidies are really discussions about big city programs; it is not even particularly a national problem. Only a handful of cities really are hurting a lot for money. But, of course, they are hurting for money for everything they do—police, welfare, schools, and so forth. There is justification for the federal government to do something about it; the federal government has more effective means than any other level of government to raise money quickly.

The theme during the last several years has been, "Let federal money be freely used, and local governments will put it where they want to put it; that will do lots of good and solve lots of problems." But as a practical political matter, Congress does not like general revenue sharing, and it is not going to happen.

Certainly from one conceptual point, it is very difficult to defend the categorical programs. Why should the federal government tell the states that it is more important than anything else to have 16 bridges or build a great river road or have a primary or secondary system? As a practical matter, though, it is not possible to get away from federal programs entirely. The federal government is going to have to give money to the state or local governments for transportation, but it is going to be tagged for transportation.

People still talk about grant consolidation—for example, a merging of urban highway and transit programs—as if that were a highly desirable goal and would provide us with a state of affairs that we do not now have. It is doubtful, however, that this would really change anything. As far as federal urban transportation grant money is concerned, the programs have got about as much flexibility as is possible, at least in terms of the eligibility of things for which the money can be used at the state and local level.

The Federal-Aid Urban System (FAUS) program provides money, at least at the state level, that can be used for any capital purpose at the local level; there are no restrictions on it other than that it cannot be used for operating money. The big issue surrounding FAUS is not what the statutes say about what the money can or cannot be used for; it is about who controls it after it leaves federal hands.

There are substantial battles going on among city and state interests over who is in charge of that money. The city interests are alleging that, by some sleight of hand, they were dealt out of what they thought they were getting in the 1973 Federal-Aid Highway Act. At bottom, the urban block grant or grant consolidation issue comes down to an institutional struggle—city governments against state governments.

If things change in such a way that the cities get more control over the FAUS money than they have now, there might be some changes in the way the money is used, but a dramatic switch from highways to transit spending is unlikely. City governments are as concerned about spending highway money as they are about spending transit money. There might be a change in the type of highway projects—fewer grandiose projects, more little projects—which may indeed be desirable, but it would not be terribly relevant to transit.

The conventional wisdom of urban planners and others of that ilk is that metropolitan regional transportation planning would be a very good thing. However, little evidence has ever been advanced on that point, other than general arguments about the benefits of doing everything on a systemwide basis. This is not a terribly strong argument, particularly if you are not building big rail or highway systems.

There is a fair body of evidence against building big rail systems, and it is doubtful that anyone will try urban interstate highways again. If neither of these is being undertaken, what would a big metropolitan regional planning agency be needed for? If there are only lots of little projects—street projects or a bus system here or there—what need is there for an intervening layer of highly paid planners? In other words, the need for a metropolitan planning organization (MPO) cannot simply be assumed.

If the local governments want to have MPOS, that is something else. If they really want them and are in a position to fight out all the antagonisms and political problems that are involved, we should not get in their way and probably ought to help them, but it should be their choice not that of the federal government. As a practical political matter, we will probably continue to have the MPOs because they are there, but they may never be more than an arena or forum in which the local politicians work out the deals they would have worked out anyway.

One of the real problems in the block grant program is how to find the middle ground between general revenue sharing and the categorical programs. It is easy to think up some piece of legislation but specify, "We will retain project-approval authority, and we will tell the local governments to figure out what they want to do; then we will decide whether it is a good idea or not."

That sounds like a fine idea on paper, but what would happen in practice? The transit operators or the city or state governments look on any form of money as their money. Once they get the legislation through, it is an entitlement. If the Urban Mass Transportation Administration (UMTA) or another agency tries to tell them they ought to think about doing this or that, they tell UMTA what UMTA can do about it; they usually take the money and do what they want with it. As a political matter, there is not much that can be done about it.

Paul C. Watt, Metropolitan Transportation Commission, Berkeley, California

The experience in the San Francisco Bay area can be used to illustrate some of the problems encountered in allocating funding for transportation. The Bay area has a metropolitan planning organization, the Metropolitan Transportation Commission (MTC), that in a sense was thrust on the region by the state legislature. It is made up of elected and appointed officials who are committed to doing a job. The MTC approach revolves around following a single funding program as set forth in the regional transportation plan. This program uses existing funding sources, accepting the doctrine we have followed for years that some big single transportation fund will not come about to solve all our problems.

It is by no means just a federal problem. The Bay area, for example, uses many funding sources in trying to solve its transportation problems. The first one is the federal family of funding from the Federal Highway Administration (FHWA) and the Urban Mass Transportation Administration (UMTA)—basically, the beautification, noise-abatement, safety, and maintenance and construction funds come from FHWA through the state. Most of them are formula related. From UMTA, there is section 5, section 3, and section 9 money. The section 3 and 9 funds are basically discretionary, while the section 5 funds are formula based.

The second source is the state, which gives 3.6 cents of the 7-cent gasoline tax that goes for the highway program. There is also some proposition 5 money, which allows a proportion of highway money to be spent for mass transit under certain specified conditions. Some state and local money also goes into transit. The Transportation Development Act (TDA) money is considered by people in the region to be local money, while officials in Sacramento would say it is state money. Its source is a 0.25 percent sales tax on gasoline authorized by state legislation and collected in each county.

The third source is local. The property tax yields about $68 million, which goes directly to the San Francisco Municipal Railway (Muni) and Alameda-Contra Costa (AC) Transit. There are also four Bay area counties that levy a half-cent sales tax that goes to transit. A fifth county is authorized to do so when the need arises. The 3.4-cent local gasoline tax is mainly for local streets and roads. There is revenue sharing in the case of Muni, the only area that uses revenue sharing for transportation. Muni also gets some general revenue that comes from the water department, which is also a part of the Public Utilities Commission. Bridge tolls were raised 25 cents to provide aid for transit.

Finally, there is the good old fare box; everybody has been agonizing over what its share should be.

The money from these four sources goes into a single transportation budget, which is then broken down into highways and transit. Even though someone is always proposing that excess highway funds be used for transit, the fact is that there are no longer sufficient funds for highways. This calls for the prudent allocation of funds to provide the most efficient transportation (highway and transit) possible. This is particularly true since some of the state highway sources are drying up, e.g., vehicle registration and driver's license funds (which also support such agencies as the Highway Patrol, Air Resources Board, and the Division of Motor Vehicles, which are using up more and more of these funds).

On the transit side, 33 to 35 percent of the revenues of major operators come from the fare box. The new operators, such as those in San Mateo and Santa Clara get 11 to 17 percent. The Golden Gate Bridge gets 48 percent. Transit also gets section 3, 5, and 9 funds from UMTA, as well as the proposition 5 and Federal-Aid Urban System (FAUS) funds.

It is really impossible to put all of these sources into one nice big pot. It is possible, though, to take these funds and finance a single program or plan. The Bay area has a regional transportation plan that sets forth how the region is to develop in terms of transportation. There is a Transportation Improvement Program (TIP) that does this. The feeling in the Bay area is that the TIP is workable; even the transportation system management element is workable. Regional transportation can work if transportation funding is allocated with everybody participating to the fullest extent possible—citizens, politicians, technicians, operators, and all the others. They must reach a consensus, and the funding must be flexible to carry out the agreed-on program.

Flexibility is very important, and the lack of it is the reason this intergovernmental problem has never really been solved. Of course, some funds are not flexible in their use. The proposition 5 money is a state source that can only be used for fixed-guideway capital. Section 3 money is basically for capital, although some operators have been able to swing a few little operating costs out of it. Conversely, section 5 is basically operating money, but a considerable amount gets used for capital; in the Bay area, about $27 million goes for operating costs and about $550 000 for capital. TDA money can be used either for capital or for operating expenses. FAUS money is basically for capital. Property tax revenue, if available, goes either way. Sales tax also goes either way, as does revenue sharing. General revenues—bridge tolls in the Bay area—can be used only for capital purposes.

There are six major operators that each year vie for their funding under this system, and one must have the flexibility to be able to trade off. For instance, Muni and AC Transit are eligible for bridge tolls, and the Bay Area Rapid Transit System (BART) is using the sales tax revenue. If BART needs more operating money because it is not getting any of the bridge tolls, some of Muni's and AC Transit's TDA money can be given to BART for operating, because this money can go either way.

With all this juggling, the region benefits through a better funding program. If the conditions on each one of these funds were strictly adhered to, the funds would not meet the needs of all operators because each year their capital and operating requirements change. It will become increasingly necessary for MTC to provide better auditing for the use of these funds. There are as many as six different auditors from as many different governmental agencies in the office every year, each saying that next year there is going to be a single audit. But we must find ways to develop performance criteria to ensure that this money is being effectively used.

This idea makes the operators very nervous, and it should, particularly since not more than 10 or 15 years ago 90 to 100 percent of their revenues were coming from sources completely under their control, primarily the fare box. Now, at least two-thirds of most operators' revenues come from sources they do not control—federal, state, and local funds. They must now learn that, if they are going to spend other people's money, they must indicate how it is spent.

The larger burden is on the MPOs—the agencies that

are trying to be sure that this money somehow gets more efficiently and effectively spent. If they are going to try (as they must) to get more money for the operating agencies, they must be able to determine what the performance criteria are and how those measures can produce more effective use of the money spent.

Workshop Discussion: Cost Allocation and Funding Structure

Three issues emerged as the major topics of floor discussion in the workshop session on transit funding. The first dealt with the form in which aid should be granted. The second related topic was whether the gasoline tax is effective and whether earmarking part of this tax for public transportation is justified. Finally, the discussion addressed the development and use of productivity measures and service standards.

THE FORM OF TRANSIT AID

It is very difficult to find a middle ground between letting local areas spend federal money according to their own conditions and priorities—that is, giving them block grants—and assuring the federal government that the money is being properly administered for the purposes that the Congress intended. One problem with block grants is that the funds are spread too thin over competing community needs to accomplish any one major project—in other words, a block grant might buy a few buses, but it could not fund a rail system. If a rail system is called for, then specific money must be allocated for it.

There are problems with specific grants too, however. They may not be sufficiently responsive to local needs and priorities, and they may not, in fact, afford the federal government very much control over the choice of projects it wishes to fund. The problems are both analytical and political. The U.S. Department of Transportation (DOT) does not have enough staff to do a thorough analysis of local situations and projects before making specific grants. Further, if a community decides it really wants a particular project, it is very difficult for DOT to ignore the political repercussions of turning it down, regardless of how much analysis has gone into it.

GASOLINE TAXES

Opinions differed on whether the rationale for earmarking gasoline taxes for the support of public transportation is reasonable. The gasoline tax is supposed to (a) discourage the use of automobiles, (b) make automobile users pay for the external effects—environmental damage and unnecessary use of energy—associated with the automobile, and (c) help provide an alternative to automobile use by supporting public transit.

There was general agreement that the tax does not really discourage the use of automobiles. First, driver behavior is so inelastic that gasoline prices have little effect on automobile use. Second, although user charges may be a desirable form of taxation, the gasoline tax should probably not be considered a user charge; the operation of automobiles is so widespread that everyone pays gasoline taxes in some degree, so these taxes are more like a general excise tax.

If the gasoline tax does not discourage driving, what is the justification of using it to subsidize transit? Is not the use of this tax to subsidize both transit and highways inconsistent?

Even though the gasoline tax may not accomplish the ends that are claimed for it, it is generally in line with national policy and thus is superior to, say, the property tax as a source of funds for the support of public transportation. To the extent that gasoline is currently underpriced in terms of the free market, a higher gasoline tax would help remove this subsidy to automobile use and would also help rationalize our foreign policy with respect to oil. While earmarking the gasoline tax for both highways and transit is not particularly defensible, the tax has proven to be a politically palatable way to get money for transit purposes.

MEASURING PERFORMANCE

The governments that provide subsidies to transit should have some assurance that the funds granted are being used effectively to provide better public transportation, but there are no set standards for effective performance. Are useful performance criteria and productivity measures being developed?

The state of California has passed legislation that includes a set of standard performance measures so that transit operators can set up local goals in common terms. The legislation does not state what these local goals should be, but it does relate future allocations of funds to some reasonable attainment of those goals.

The federal government's standardized reporting procedure will provide DOT with the kinds of information needed to develop a standard data base for transit operations. Eventually, performance standards can be developed so that the effective use of federal grants can be audited.

Pennsylvania is urging, and may someday require, that each transit authority develop its own set of standards. These standards are stated in terms of goals—so much cost recovery, so much ridership, and so forth. This will permit systems to monitor their own performance.

Cincinnati has localized standards that vary for different types of service within its own system. For example, express buses are expected to meet different standards than are local-service buses. This avoids the assumption, inherent in standardized measures, that all transit is the same and operates in the same environment.

Regional transit systems that are supported by several communities have a particular problem in setting performance goals. The localities that pay the bills may have different public transportation objectives. A very densely settled community may consider transit a public service and favor a proportionately large subsidy; more thinly settled suburban communities may