a portion of your interstate apportionment and put it into PRPL funds. The current 1.5 percent and 0.5 percent would become a base level for the program, with requirements to continue support for current funded organizations and jurisdictions, such as MPOs. States and urban areas would then have the discretion to increase their planning and research for a less capital-intensive solution as required by local circumstances.

Such a proposal is really a step, or at least I think it is, to a block grants program for the federal highway program, a direction wholly consistent with current Administration policy. It would mean that states and counties make trade-offs for allocating limited funds among planning management and capital projects, rather than that these projects be dictated by federal formulas in conflict with federal statutes and policies.

With the reduced funding levels we are facing today, all jurisdictions must meet growing transportation demands through better management of existing facilities and improved maintenance. Without planning support, these objectives cannot be met in urban areas where traffic generates approximately 55 percent of the highway trust fund revenues. That the District, at least, needs to continue the present level of planning research cannot be overemphasized.

Many people have made the assumption that they can leap to the federal role in planning without first addressing whether or not there should be a planning process in urban areas. I think there has to be an urban transportation planning process, at least in the larger urban areas where the population is more than 250,000. The planning process has to do the things that cannot be done separately. We have to have a mechanism to determine among ourselves the compatibility of our investments. For example, it does not do Virginia any good to plan a road for which the District will not provide the bridge capacity. It does not do any good to make assumptions about travel patterns that we are trying to reverse. In a complex urban area like the Washington Metropolitan Area, there is a need for a common data base on growth, land use, and patterns of travel and a forum to debate common local finance needs.

The urban planning process is also a home for specialized technologies and technicians that the local jurisdictions in the area or the states cannot either afford or do not wish to provide. Last, but not least, the process mechanism is a forum for disagreements. Without a metropolitan planning process, the Washington Metropolitan Area would never have come to grips with the construction of I-66 to the District boundary. The very existence of the urban transportation planning process ultimately allowed the local jurisdictions to come to terms with that investment.

More importantly, if there is a federal source of revenue, there probably are going to be some federal responsibilities that come with that revenue. There is a need for a federal role in determining the compatibility of the various federal investments that are made from the agencies within the DOT.

There is a need for a federal role in the development of methodologies in data processing. There is still a federal role, until the Congress changes the legislation, in air quality. There is still a federal role in energy efficiency in the transportation system as a national concern. There is still a federal role for nondiscrimination in the application of those funds.

In cities under 200,000 I am convinced that you have to have the maximum amount of flexibility, whether a city or a county wants to name itself the MPO. Somebody has to come to grips somewhere in those cities between 50,000 and 250,000 with who is going to take some kind of lead in the transportation planning process—again, within some broad guidelines and with the maximum amount of flexibility in programming and the level of analysis.

There is a strong national need for urban transportation planning processes and organizations, a strong need to support them financially, and a recognition of what the proper federal role is.

## PHILIP J. RINGO ATE Management and Service Company

Transportation, and particularly urban transportation, is at a major crossroads as we plunge into the 1980s. Even though I think there is a great deal of apprehension regarding the need to do "more with less," I feel that the environment that we are now entering into is in many ways healthier than the environment of the past 10 years.

From the transit operator's perspective, the experience of the past 10 years was in many ways far removed from reality. After a much needed stabilization of urban transportation systems throughout the United States, and an even more needed infusion of capital for new equipment and facilities, many transit operations embarked on what appeared to be an environment of almost unlimited expansion and growth. Money in hand, we proceeded to expand and improve service often without proper evaluation of the need and demand for such expanded service. We seldom questioned the long-range implications of increased dependence on federal subsidies and the impact that artificially low fares had on public perception and the economics of our operation. In all too many cases, we collectively did not apply sound management practices to the planning and design of our transit systems or the service pricing mechanism.

Swept up in this euphoria, we all invested time and money in projects that, in retrospect, should have received much stronger and more practical scrutiny. In the search for new solutions to this country's transit problems we discarded much of what we had learned over the past 50-60 years, and also seemed to delude ourselves that there was a magical solution, be it technological, managerial, or planning based, that would provide a miraculous cure for all of the ills of a very complex transportation problem.

The legacy of all this is, or should be, sobering. There are cynicism and skepticism at all policymaking levels regarding the ability of the transit industry to even place a reliable product on the street. Further skepticism and cynicism exist that rather than focusing on immediate practical problems, we collectively continue to search for the PRT, Hovercraft, or other Aladdin's lamp cures to the provision of urban transit in the United States.

Whether you agree or disagree with my assessment, let me try to relate what I am saying to the specific problems facing the transit operators over the next 18-36 months and try to relate those challenges to the specific planning needs of transit operators. Because of the proposed cutback in federal operating assistance, and because of the impact of increased inflation on a labor-intensive industry, most transit systems throughout the United States are faced with the prospect of

losing from 10 to 50 percent of their operating funds. Although there is a possible option of increased local and regional support for transit in place of federal subsidy, at ATE we are being asked on most of our systems to develop plans for reduction in service from 10 to 50 percent and for fare structure recommendations that will provide increased revenues with the smallest impact on ridership.

As a further requirement, we are rightly being asked to examine alternative forms of transportation, alternatives other than traditional fixed-route transit, with the hope that a combination of fixed-route service, taxi, vanpool, carpool, and other less traditional forms of transportation can provide a network that is able to respond to the broad-based mobility needs of the communities we serve.

These are the simple and compelling facts of life for a transit operator in the United States today. He or she must be able to respond in a rational way to major reductions in available resources. The days of free-fare demonstrations, crosstown route experiments, grid systems, PRTs, etc., are over.

Translating that into specific planning needs for the operator, I can identify four major areas of immediate planning need.

The first area relates to the fare policy and the general subject of user charges. There has been a great deal of research performed, but it is clear to me that a better understanding of the dynamics of fare policy applied to urban transit systems is a must both for the transit operator and the transit policymaker. For lack of such planning tools, I have seen too many systems recently suffer near collapse when poor planning has caused an increase in fare of 50-100 percent. I have also seen an almost total change in the traditional formulas that we as transit operators could apply with certainty to fare increases in the past. I have seen healthy debates regarding distance-based fares versus other forms of fare structure, but I have yet to see anyone pull together this knowledge into a coherent package that can be used at the operations and policymaking level. My suspicion, based on experience, is that a series of smaller incremental fare increases, tied in some manner to inflation, is a realistic and practical way to deal with the economics of transit in the 1980s. My further suspicion is that a two-tiered fare structure utilizing the appropriate fare marketing techniques is a way to deal with the question of transit-dependent versus choice riders. I think that many systems in the United States, in some cases by accident and by rational planning, put together fare policies and structures that are appropriate for the 1980s.

The second area is service design and evaluation. Although there has been substantial activity in this area-and in the case of service standards the development of some practical procedures and policies that can allow transit operations to make rational decisions-much more needs to be done. Transit systems and the planning sector must develop improved procedures for evaluating transit service and its impact on the urban environment. Service standards must be built on in terms of research, and a service planning product must be developed that will provide transit governing boards and operators with direction and that will give the general public the rationale behind service reductions and eliminations that are an inevitable result of the trends of the 1980s. Without these tools, transit will be faced with increasing political pressure to maintain unproductive service and will be able to provide few financial options.

The third area of concern is a combination of the first two. Transit operators and planners need to examine more closely the relationship between fare changes and service changes. In the 1970s, we usually dealt with these independently. Financial crisis meant either increase in fares or reduction in service. Now and in the future, we can expect that both of these will take place at the same time. In our experience, there are clearly trends and dynamics between these two factors that need to be understood, institutionalized, and incorporated into the planning process.

The fourth area of concern relates to the necessity to understand and develop a more cohesive network of transportation services. Although I think that transit operators have come a long way in acknowledging that there is life beyond fixed-route service, I will also tell you that I think none of us completely understands the interrelationship and potential dynamics that exist between fixed-route service and the other extremely important forms of paratransit service. For example, how can we best substitute vanpool and carpool operations when fixed-route service must be eliminated in an area? How is this best accomplished, and over what period of time and at what cost? Should fixed-route transit operations only attempt to provide service for certain trip lengths and within a certain limit of population density? At what point does a fixed-route transit system simply cease to work because of limitations on the frequency of operation? I happen to think that there are answers to these questions, and further believe they are ones that should be developed through a rational transit planning

In closing let me strike an optimistic note. For the first time in my memory, transit understands where it is going. It is going to have to make do with fewer resources, cannot look to a future of unlimited and unrealistic growth, and does not have the luxury of searching for esoteric and unrealistic solutions to problems that perhaps never even existed in the first place. However, I do think that over the past 10-15 years we have built a strong base from which to deal with this challenge.

## ROYCE E. HANSON National Academy of Sciences

Transportation planning ultimately is most effective when it is integrated into and a part of the overall planning process of a community that has a good planning process. Unfortunately, many of our regulations not only in transportation but also in many other areas are developed to deal with the worst case. We ought to be able to think about how we can handle the best case—or, at least, the median case—in a way that provides for a more effective, efficient, less costly process. If we recognize the validity of the comprehensive planning process where it meets those necessary federal planning requirements, we can shortcircuit a lot of wasted time and money, and we can get more for the transportation dollar that is available.

Local planning is often more comprehensive than the required transportation planning process is. It involves greater, more widespread, and more useful participation—or at least it can. It can provide a higher degree of political responsibility, and it can save time.

Where possible, state and federal plans, or the state and federal planning process, can and should be consolidated with the local process. Where it is not possible and if the planning