loring 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 interrelationships 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 process.

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.

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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 short circuit 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
process can be certified or accepted by the state and federal
governments as meeting the necessary federal procedural
requirements, it ought to be allowed to substitute for that
process.
In some cases, federal planning funds could be used
through the state agency and through the MPO and the local
planning agency very effectively and integrated with the pro-
cess.
One very practical thing that we might do in seeking a new
relationship between the federal, state, and local governments
is that new locational studies should be precluded where there
is an adopted master plan that meets federal process re-
quirements.
Such process requirements might include that alternatives
were seriously investigated and considered, that reasonable
environmental studies were conducted, that federal environ-
mental standards were respected and followed, that due pro-
cess and participation of the public and important agencies
were provided, that a decision was made based on all of the
evidence, and that the decision is adequately explained either
by the plan document or by the supporting record.
Another broad area to be dealt with is the change occurring
in the character of our political perceptions. We were anticipat-
ing an upbeat economy, a very substantial rate of national
growth, and a sense that there were really no limits to what the
United States could accomplish if it set its mind to it. We are
a little bit more cautious about that kind of judgment today, but at
the same time there is a greater need, in a time of contracting
expectations than in a time of expanding expectations, to think
in long-range terms.
We are already seeing the problems that we have in not
having thought through originally the depreciation of the sys-
tem. Clearly, as we re-think the transportation financing pro-
cess for all transportation facilities, long-term capital financing
schemes need to include some kind of depreciation system so
that we build into the financing network a way of replacing the
system and keeping the system in good repair.
There is a great need for reliability in our incremental capac-
ity to improve efficiency and to improve the capacity of the
system, to support economic growth and change. Infrastructure
and transportation in particular are key elements in the
urban economy. In most of our already developed urban
areas, transportation is now the most important part of the
infrastructure.
A third area to examine is the movement in this country,
particularly at the local level, toward a much different form of
planning than that that existed when we began the transporta-
tion planning process as a part of the federal requirements.
Most of our local master plans were what I would call in-state
plans. They painted a somewhat irrelevant picture of an im-
probable future. Generally, it did not quite make it. Planners
and comprehensive planning agencies have begun to look at
the whole process quite differently in the last 10 years. We are
in an entirely new generation of planning, which is going to get
more complicated and more sophisticated, at the local level in
particular.
This is looking not only at land use but also at density and at
facilities.
Planning is becoming a much more dynamic midrange exer-
сise at the local level, much more integrated with all of the
other facets that ultimately affect and are affected by the
efficiency and adequacy of the transportation system. We are
planning for both facilities and processes now.
We are also beginning to understand that the character of
the city of today, and particularly the character of the city of
tomorrow, will be much different than the cities we have as-
sumed in the past and that, in many cases, have not de-
veloped.
With the decline of manufacturing as a part of the economic
activity of the country in terms of number of people employed,
and its relative decline even in terms of income produced, the
growth of service industries means that the character of cities
is taking on quite a different shape.
So, when you put together the change in the character of
planning and the change in the character of cities, it suggests
to me that it is even more imperative that transportation plan-
ing be looked at within the broader planning and develop-
ment context.
Finally, the partnership between federal, state, and local
governments has been expressed in almost every way possi-
ble. Everybody seems to believe it, but we have got to make
that leap from faith to action. In areas such as transportation
planning, in areas such as considering the future of our urban
places, we still lack an integrated federal approach to the
making of policy.
The concern and the interest expressed on some of the
points raised here need to be translated into a new policy
formulation process within the federal system, so that we can
sort out some of these major questions of priorities, both at the
national and at the regional level.