## **WORKSHOP 6: THE COLLECTIVE PERSPECTIVE**

Thomas B. Deen, Alan M. Voorhees and Associates, Inc., Chairman

THE general subject of evaluation measures for public transportation is broad enough that a group needs, if it is to deal comprehensively with the subject, to break it into pieces and attack each one at a time. The other workshops, of course, had such a focus, each dealing specifically with the problem of evaluation measures from the standpoint of the operator, the grantor, etc. However, Workshop 6 was the "collective group" and was to look at the problem from all of these perspectives plus others. In early discussions it became apparent that the breadth of the general subject was such that after several hours the group had only hit pieces of the problem, and there was concern about how one could deal with it comprehensively in a brief period.

Perhaps this breadth issue is the reason the workshop developed 16 research projects. It is fair to say that no one in the group felt that we had dealt comprehensively with research needs in transit evaluation, even with 16 projects. Nevertheless these are what were developed, and the group felt they were statements that dealt with research that could well be used in the transit field.

Of the 16 statements, 10 were concerned with the subject of evaluation; 5 involved increasing the number of options available to transit planners for new types of service; and 1 dealt with increasing the efficiency of existing transit to reduce costs and provide better service with less expenditure of public funds.

It is significant that the two research statements selected as highest priority did not deal with the subject of evaluation but rather dealt with the question of widening the range of options. This is symbolic of the basic thrust of the workshops' discussions, since there was great dissatisfaction expressed about the ability of conventional transit modes to satisfy the objectives desired from improved transit. There was also considerable concern expressed about whether the increasing amount of public works being devoted to transit was resulting in sufficient achievement of objectives. And there was a real question as to whether additional cash funneled into conventional transit would result in enough additional benefits. The escalating costs in the operation of conventional systems and the relative lack of response of additional patronage was the basis for these concerns. There was doubt expressed about whether taxpayers would continue to be willing to fund this type of activity indefinitely.

The committee believes there were other opportunities that in many instances could better fulfill transit objectives, such as increasing emphasis on bus priority, chartered service, jitneys, more competition on existing routes, and the elimination of legal, regulatory, organizational, and labor restraints to innovative approaches to service improvements.

The two research projects selected as highest priority are indicative of the committee's mood in this respect. Research statement 6-6 was aimed at developing more innovative service to either reduce the costs of conventional transit or to adjust both service and activities so that they could better serve each other. In the first instance, the idea was that the very high cost of supplying the equipment and drivers (many of whom had to be paid for a full day) for peak-hour service could perhaps be relieved by providing a lower level of conventional service and providing for peaks by using a version of paratransit services. In the second instance, research was aimed at attempting a detailed investigation of the needs of the transport-disadvantaged and identifying those activities such as medical, shopping, educational, and social that might be rescheduled so as to allow a relatively low level of paratransit activity to service well the resulting demands.

The second high-priority research project proposed dealt with examining the high proportion of non-CBD travel that was found in most cities and attempting to find ways

in which this demand might be better satisfied. Transportation surveys have indicated that anywhere from 70 to 90 percent of total travel has no destination or origin within the central business district. Despite this, conventional transit services are aimed primarily at, and most ridership comes from, CBD activities. To service the very large non-CBD market requires disaggregation of the market and identification of its components and the development of individual services to service various components of the non-CBD market.

Research projects 6-9, 6-10, and 6-11 dealt with the collection of data and the development of information that will be useful to planners and decision-makers in evaluating various types of improvements and the benefits to be gained from them.

During the last session of the workshop, the discussion moved in a more somber direction. Concern was expressed in the aggregate that the project statements did not express nor was the committee able to identify an overall central focus where the greatest needs were for better evaluation measures. The suggestion was made that our dilemma was caused by a lack of clarity in the objectives we wanted transit to satisfy. But this was rejected and the thought emerged that the problem was in a lack of refinement in our ability to measure consistently and with accepted scales the goals satisfaction produced by transit. However, after additional discussion it was concluded that the real problem was that the impacts of transit were too small to be measured. For example, if our laudable social objective of decreasing unemployment by providing transit service to low-income areas has had any impact at all, the effect has been so small that we have not been able to satisfactorily measure it. On the other hand, if we had been able to reduce unemployment by 15 or 20 percent, it is likely we would be able to measure it and recognize its significance. Similarly, if new transit service were able to decrease traffic congestion by 30 percent, no doubt we would be able to measure it. The problem seems to be that we are looking for a needle in a haystack and that the overall noise level in the system is sufficient to cause variations greater than the impact of transit.

Transportation systems in urban areas in the United States have recently received perhaps the biggest perturbation likely for years, first with the impact of the environmental protection laws that demanded the decrease in vehicle miles of travel in several areas and finally with the rapid increase in price of, and shortages of, fuel. The net result of all of this was that transit use increased by varying amounts but in the general range of 10 percent. Unfortunately, a 10 percent increase of a mode that is only carrying 10 percent of the travel in the first place is only 1 percent of total travel. Thus, even with an enormous and likely unrepeatable boost, we were able to demonstrate only a change on the order of 1 percent in the impact of the total system. During the conference, the group was cheered by relatively insignificant improvements that seemed to be moving in the right direction. For example, Frank Davis's report of the development of bus pools outside of the normal transit service area in Knoxville was very heartening, but it is clear, although we may hope that such innovations spread and thus have a larger impact, that as of the moment we are able to report very little impact on the total system by these kinds of activities.

All of this led the workshop to believe that we simply must have more options for new types of service, reduction in the constraints to innovation, and a recognition that our present course is not satisfying the objectives that society desires and even demands. Our solutions seem to be mostly of the Band-Aid variety while the patient is demanding major surgery.

Following are the research projects proposed by Workshop 6:

- 6-1. Effects of the Absence or Decline of Scheduled Public Transportation Services on Those Who Are Expected to Be Dependent on Transit
- 6-2. Benefits of Transforming Institutional Constraints to Incentives for Innovative Transit Service
- 6-3. Economic Impact of Labor Practices on Transit Efficiency and the Implications of Current Trends
- 6-4. Improved Techniques for Identifying and Serving Transit Market Requirements

- 6-5. Benefits of the Transit System Stratified by City Size (Not Limited to Dollar Measures)
- 6-6. Advantages of Scheduling Activities in Which Transit Users Engage to Be More Compatible With Efficient Transit Operations
- 6-7. Transit Alternatives for Non-CBD Travel
- 6-8. Development of Measures and Standards to Assist Definitions of Travel Service Levels
- 6-9. Development of Aggregate Measures Providing Comparison Between Cities of Levels of Services
- 6-10. Identification and Development of Standard Definitions and Techniques for Collecting Data Required for Evaluation and Performance Measures
- 6-11. Development of Standardized Benefit Measures for Transit Evaluation
- 6-12. Public Transportation Versus Other Community Services and Facilities
- 6-13. Classification of Alternative Service Concepts and Identification of Major Similarities and Differences in Layman's Terms
- 6-14. Analysis of the Relationship Between Transit System Evaluation Measures and the Variables Being Controlled That Affect the Evaluation Measures
- 6-15. Development of Guidelines for Methodology and Research Design for the Evaluation of Transit Service Demonstrations and Trials of Innovations

A detailed description of each research project is given in Part IV of this book. The top-ranked projects selected by this workshop were

- 6-6. Advantages of Scheduling Activities in Which Transit Users Engage to Be More Compatible With Efficient Transit Operations
- 6-7. Transit Alternatives for Non-CBD Travel
- 6-13. Classification of Alternative Service Concepts and Identification of Major Similarities and Differences in Layman's Terms