

INTRODUCTION

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During the past 4 years, the demand-responsive transportation (DRT) concept has evolved from an experimental to a production stage. C. Kenneth Orski, associate administrator of the Urban Mass Transportation Administration, stated in his keynote address at the conference, "The utility of demand-responsive transportation requires no further proof. More than 50 DRT systems in some 22 states testify to the popularity of the concept." To reflect this acceptance, UMTA has recently made its first capital grants for DRT systems.

In light of these developments, this conference did not focus on concepts and systems that already had been tested. Rather, it was oriented toward a number of significant issues that are still unresolved and will impact the future of demand-responsive transportation. These issues include the following.

1. Integrated service. Most of the implemented demand-responsive systems are in small- and medium-scale cities that have few or no fixed-route bus systems. The role of demand-responsive service in larger metropolitan areas that have significant fixed-route service is still unresolved. In particular, the issue of how demand-responsive and fixed-route services are integrated is of utmost importance. A number of difficult areawide approaches are currently being implemented in Ann Arbor, Rochester, Orange County, Santa Clara County, Regina, and Toronto.

2. Service for the elderly and handicapped. The door-to-door service aspect of demand-responsive transportation provides unique opportunities to offer service for the elderly and handicapped. However, should that service be combined with more general demand-responsive service or should it be provided as a special service? What special design features must be included in vehicles to serve these groups?

3. Role of automation. All of the demand-responsive systems implemented to date have used manual dispatching techniques. The new areawide systems will use a number of different automated dispatching approaches. Considerable debate exists as to what the role of computers should be and whether dispatching should be computer aided or computer controlled.

4. Taxicabs and demand-responsive transportation. During the past year, a number of DRT systems operated by taxi companies have been implemented. The conference addressed not only the role of taxi companies in DRT operations but also the more general issues of taxicab operations. Charles Boynton, president of the International Taxicab Association, in the opening address at the conference, presented his views on the future of the industry and, for the first time in this series of conferences, one session was devoted exclusively to taxicabs.

DRT and conventional taxi operations are 2 examples of a class of transit-like service that has recently been referred to as "paratransit." Other paratransit concepts

include car pooling, van pooling, subscription bus, and various types of rental car services. Because of the increasing importance of these options, a Transportation Research Board Committee on Urban Transport Service Innovations (Paratransit) was established this year. The committee was responsible for the organization of this conference. In many ways, the objectives of this new committee are similar to those of the conference:

1. Recognition that demand-responsive transportation involves many different groups, such as transit, taxi, labor, and government, who must understand each other and be able to work together;
2. Recognition that a number of significant unresolved issues are common to many different paratransit concepts, some of which are technical issues such as ride-sharing techniques and vehicle design and some of which are institutional issues such as regulation, insurance, and labor; and
3. Realization that any successful urban transportation system should consist of integrated paratransit and transit services rather than sets of independent uncoordinated services.

We have only begun to understand many of these important issues and to initiate a number of promising new service concepts. Much remains to be done in the coming years, and progress will be reported at forthcoming demand-responsive conferences and other similar forums.

The active role that UMTA has played recently in the area of paratransit is encouraging. This was the first year that UMTA was a cosponsor of the demand-responsive conference. UMTA staff provided us with assistance in organizing the conference, and many key UMTA professionals were participants in the conference. In addition, UMTA provided some financial support to assist in the distribution of these proceedings. We are extremely grateful for this invaluable assistance.

The Sixth International Conference on Demand-Responsive Transportation Systems will be held March 15-17, 1976, at the Sheraton-Park Hotel, Washington, D.C. Those interested in attending or presenting papers should write the Transportation Research Board, 2101 Constitution Avenue, N.W., Washington, D.C. 20418.