Role of Paratransit in Rural Transportation

Workshop 4 Resource Paper
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Virtually the only existing public transportation in rural areas consists of paratransit modes: taxis, car pools, jitneys, and demand-responsive and subscription buses. This situation is logical and should be expected because conventional fixed-route transit cannot meet the mobility needs of rural residents. The nature of rural travel demands tends to mitigate against fixed-route transit, and thus few conventional operators currently provide local transit services in rural areas. The demise of most small, private intercity bus lines completes the picture of an area in which conventional public transit can no longer be found.

TRAVEL CHARACTERISTICS

Conventional transit requires heavily traveled corridors, which do not exist in rural areas. The dispersed nature of rural trip-making demands is basic to the understanding of rural transportation problems. In addition, trips made in rural areas are relatively long. Greater distances between various activity centers and residences result in average trips that have considerably greater distances than those in urban areas.

Automobile dominance is another major factor of rural travel. Although they have lower average income levels per capita, rural residents own as many automobiles as urban residents. However, many vehicles in rural areas are in poor condition and are not reliable. Unusable vehicles are found alongside the homes of many rural poor (1).

A large number of rural people are transportation disadvantaged because they either are unable to drive an automobile or cannot afford to purchase and maintain one. Census data show that a disproportionate number of rural people are poor and have incomes below the poverty level. In addition, a significant number of rural people are elderly, and a surprisingly large number are physically handicapped. Thus, a number of people in rural areas have special transportation problems. The availability or lack of public transit will in many cases determine whether they are cut off from the mainstream of society or are able to lead full and productive lives.

GROWTH OF PUBLIC TRANSPORTATION IN RURAL AREAS

Recognition of the problems of the transportation disadvantaged has been largely responsible for a rather remarkable growth and interest in rural public transportation in recent years. During the 1960s, the Office of Economic Opportunity (OEO), now the

Community Services Administration (CSA), initiated a variety of programs in rural areas that were designed to help take people out of the poverty cycle. Local OEO-funded Community Action Agencies (CAAs) had consistently identified transportation as a major problem area that hampered the effective delivery of social and health services to their clients. Community workers in the CAAs spent a large portion of their time transporting poor people to and from the agency. In response to these needs, many rural transit systems were started with demonstration grants from OEO. By 1972 more than 50 rural transportation projects had been funded by OEO (2).

These systems were small and personalized and usually provided door-to-door service. The vehicles used initially were large government-surplus buses that provided trips connecting the rural areas and the small towns where the various health and social service agencies are located. These paratransit services were sometimes operated along a fixed route with designated stops but more often deviated from the route to provide door-to-door service.

Community Action Agencies were the first to develop these social service delivery systems, but recently other government agencies, including the U.S. Department of Labor, the U.S. Department of Health, Education and Welfare, the U.S. Department of Agriculture, and the Appalachian Regional Commission, have established rural paratransit services for their clients. Most active has been the Administration on Aging (AOA) of the Department of Health, Education and Welfare, which was authorized to conduct transportation research and demonstration programs under Titles III and VII of the Older Americans Act (3).

The 900 services being provided under AOA funding include a variety of systems, a high proportion of which are demand-responsive operations. Of the 314 projects that reported on the types of service, 36 percent were demand responsive, 18 percent were fixed route, 28 percent were a combination of fixed route and demand responsive, 15 percent were volunteer, and 4 percent were reduced-fare taxi. There were 255 projects involved in the routing of vehicles. Of these, only 55 or 22 percent did not have a demand-responsive component (4).

Notably absent in the rural transit scene until recently has been the Department of Transportation. Because of the initial legislative focus on urban areas, there was little DOT activity in rural transit until section 147 of the Federal-Aid Highway Act of 1973 authorized a Rural Highway Public Transportation Demonstration program and the National Mass Transportation Assistance Act of 1974 provided for some capital assistance to rural (nonurbanized) areas. These programs are covered in more detail by other papers in this report.

INTERCITY BUSES

Public transportation in rural areas used to consist mainly of intercity buses. Many small, private operators had franchises to provide service between small towns and thus supplement the major routes operated by the larger interstate carriers. As automobiles started to dominate the intercity traffic, the routes between the small cities rapidly became unprofitable. By the 1970s, few small intercity operators remained. Even when there was an extensive route network, these systems in fact served only traffic between large towns. They did not provide an extensive local service, although in general they picked up anybody who desired service along the route. However, persons who did not live within walking distance of the routes were still without public transportation. In addition, service between the small cities was rather infrequent. If a rural resident could get a bus into town in the morning, he or she could not be sure a bus would be going back that afternoon. In some cases the service was not daily, but rather 2 or 3 times per week.

RURAL TRANSPORTATION PLANNER

Transit operations in rural areas were initiated not by transportation planners but

usually by CAA agency directors who perceived mobility needs among many of their clients and, therefore, started a transportation system to handle these needs. This is a significant fact and should not be overlooked in the future planning of transit for rural areas. Rural transportation service planners had no technical expertise. They simply recognized the problem and went at it the best way they knew how.

Fortunately, few of them were aware of the urban transportation planning process and did not use sophisticated models to develop their systems. Using a "seat-of-the-pants" approach, they identified the location of their clients and tried to provide door-to-door service to meet their most critical transportation needs.

Large government surplus vehicles were acquired, and elderly or unemployed drivers were hired to drive the vehicles. Repairs were done by local garages that were not able to keep the older vehicles running reliably. In most cases a preventive maintenance schedule did not exist.

It is easy to be critical of the poor planning and management exhibited by most of these systems, but these operations have provided door-to-door services that have significant positive impact on their passengers.

ECONOMIC EFFICIENCY

There is no denying that there is a high cost per passenger trip for rural transit. In an analysis of 12 existing systems, the reported costs per passenger trip ranged from $3.86 to $10.51; the average round-trip cost was $6.71. Although these costs are high in comparison to urban person trip costs, 2 important factors indicate that these rural systems are actually being operated at a reasonable cost and are quite efficient.

First, very long trips are being serviced. The average round-trip mileage ranges from 25 to 326 miles; the average vehicle round trip consists of 97 miles. Vehicles seldom deadhead, and most passengers ride for the entire round trip. Thus, the average cost per passenger-mile is approximately 6.9 cents, which compares quite well with urban bus systems.

Second, the average load factors are more than 65 percent. This compares well with average urban load factors, which are usually below 50 percent, except in the largest cities. This high seat occupancy rate is usually found in rural systems because they are sensitive to local trip-making desires and provide more personalized services. Thus, among the systems that were analyzed, important mobility needs were being satisfied in a cost-effective manner even though the cost per passenger trip seemed high when compared with data from urban systems (5).

CONSOLIDATION OF RESOURCES

The most profound impact on transportation in rural areas will come from finding ways to more efficiently use equipment and labor that various agencies currently use to provide paratransit transportation services. This means that 10 agencies providing services for the elderly in a county should consolidate their vehicles and drivers into one system that could provide better service at a lower cost per passenger trip.

But why is this not being done now, and what should be done to facilitate consolidation? At the federal level there are a large number of funding sources for transportation, but the regulations that determine their use are usually quite restrictive. Therefore, we must change the regulations that do not allow flexibility in the use of currently available transportation funds. Unfortunately, the institutional impediments to changing these regulations are found at every level of government, starting with Congress, which enacts the laws that must ultimately be implemented by local agencies.

Laws that affect rural public transportation are developed by many different congressional committees. These various pieces of legislation have not been coordinated to determine whether they create overlapping programs or whether they allow for sufficient flexibility so that some consolidation is possible. Of course, this is not unique to the area of transportation. The interfacing of many federal social service programs

is made difficult by the uncoordinated nature of the congressional committee structure.

On a more positive note are some recent efforts toward coordination of transportation legislation by a number of Senate committees, including the Special Committee on Aging and the Subcommittee on Transportation. One task being considered to facilitate this coordination is a study of the total amount being spent on special transportation service by all federal agencies. An agency such as the General Accounting Office may be asked to enumerate these programs.

An interagency task force of the Southern Federal Regional Council has been studying rural public transportation. Brooks, a member of this task force, documented the administrative jungle created by the many separate sources of federal funds for providing transportation service (6):

> The Departments of Health, Education and Welfare, Labor and of Transportation and the U.S. Office of Economic Opportunity fund no less than fifty (50) human service categorical and formula grant programs that authorize the provision of a payment for transportation services.

The same type of problem exists among the various state-sponsored special transportation services. There are too many uncoordinated restricted sources of funds for transportation programs. Suggested improvements for state governments, however, need not stop with better coordination. In addition to enacting better legislation and implementing coordinated programs, the states can establish umbrella agencies that are empowered to consolidate disparate sources of funds. Probably the best example of a state-created agency that was established to coordinate specialized transportation services is found in Delaware. The Delaware Authority for Specialized Transportation (DAST) embodies a successful approach for funding and operating specialized transportation services on a statewide basis. In essence, the legislature created an authority that could provide transportation services to a wide range of client agencies under purchase-of-service contracts.

Local county governments, the United Fund of Delaware, and numerous private agencies now contract with DAST to provide transportation services for their clients. In almost every case, the cost to the agency is less than was previously the case. This may not be a feasible solution in every area, but is certainly indicative of the strong role a state agency can play in coordinating specialized transportation services.

Local efforts at coordination are also helpful in reducing cost and providing better services. Some rural transit systems have been successful in providing transportation services to more than just one agency. Typically, these systems were started as a result of a grant from OEO and were initially used to provide service to clients of local CAAs. A number of enterprising CAA directors recognized that they were not fully using their vehicles, while other agencies in the same county were experiencing transportation problems associated with delivery of services to their clients. Thus, in a number of counties arrangements were made by CAAs to provide transportation to clients from other agencies. Of course, this is feasible only if the regulations that were mentioned earlier are flexible enough to allow for purchase-of-service arrangements.

SKILLED MANAGERS AND PLANNERS

Since rural transit systems are usually run by a small staff, the effectiveness of the manager is the key to the success or failure of the system. The caliber of the person who directs the operation usually determines how well the system meets the transportation needs of its clientele. A good manager will use entrepreneurial skills to market the system to county governments and social and health service agencies to secure service contracts. He or she will be creative in the scheduling of vehicles to provide a reasonable level of service at costs that are not exorbitant.

But how can good managers be found and retained? First, a new thrust in training is needed. Universities that have programs in transportation planning and management currently concentrate on producing persons who are, as noted earlier, competent in

doing modal-split analysis and running large transit operations, but are not sensitive to the individual needs of those who are transit dependent. A new academic option must be available that would train students who are interested in planning and managing specialized transportation services.

Perhaps even more important is the need to start paying competitive salaries to these system directors. A competent manager will hardly be enticed by the $6,000 to $10,000 per year that is being offered by most rural transit operations.

VEHICLES AND SOCIAL STIGMA

It is somewhat surprising that there does not yet exist a small vehicle that most operators find suitable for use in rural areas. Modified vans have been used fairly successfully in many systems, but many operators desire a small vehicle specifically designed for transit service that has factory designed and installed modifications for the elderly and handicapped. UMTA is funding a project that will develop a specification and design for a small bus that will accommodate the needs of the elderly and handicapped. This is an important area that should be supported by funding that will allow rural systems to rapidly reap the benefits of this project.

Another vehicle-associated problem often encountered in rural areas is that the system is identified as being only for poor people. School buses and government-surplus vehicles were used by many CAA agencies as a low-cost way of starting a system. Unfortunately, the poor condition of the vehicles and the fact that passengers were usually from low-income groups created some barriers to other groups. The stigma of a "poor people's bus" negates some of the potential of these rural systems and tends to inhibit ridership. This factor also inhibits the amount of local business and governmental support that is received.

There are also real problems of comfort associated with the use of school bus vehicles for transporting the elderly. The fact that there are a large number of underused school bus vehicles makes their use seem attractive. But, they provide a second-rate service that is not conducive to attracting ridership. Therefore, unless cost savings are unusually large, which is unlikely in the long run, the school bus solution will not be the best choice.

PUBLIC SYSTEMS, SPECIALIZED SYSTEMS, AND DOOR-THROUGH-DOOR SERVICE

An issue in rural transit that is currently being debated is whether to focus on special services for subgroups of the population or to provide a wide variety of services for the general public.

A transit system that appeals to the total rural population will focus on work trips, providing for the most concentrated number of trips that are made during the early morning and the late afternoon by persons who are on their way to and from work. This is the traditional transit market in urban areas, and some think that a publicly funded system should not be restricted to special groups.

In rural areas (and in many urban areas), most recent transit planning establishes a hierarchy of needs in determining the highest priority trips to be served by public transportation. This has resulted in the proliferation of specialized transportation services that are oriented toward serving the health, social service, and shopping trips needs of persons who are transportation disadvantaged. In the past when federal and state demonstration grants were no longer available, these specialized systems found little support among local officials. If these systems served a larger and less restricted population, then continued local support of the service would have been more likely.

The cost considerations that enter into the debate on public versus specialized systems are not conclusive. Proponents of specialized systems argue that trying to serve all trips will be beyond the financial capability of rural governing bodies. However, a

conventional fixed-route system is not the only alternative to specialized service. A far more cost-effective way to serve work trips is the subscription bus, which only provides service on a prearranged repetitive basis. Planners should be sensitive to the local needs of various subgroups and try to tailor services to individual trip-making desires.

There is little likelihood, however, that a significant portion of the trips made in rural areas will ever be served by public transportation. Thus, the question remains whether local public funds will be spent for a small subgroup of the population.

A further complication is the real need by many of the transportation disadvantaged not only for door-to-door service but also for door-through-door service. Many handicapped people will need assistance in getting into their homes, and some elderly will need assistance in getting packages off the vehicle and into their homes. Thus, the door-through-door concept further personalizes the service, but, at the same time, significantly increases the cost. This service is desired and required by many rural residents to increase their mobility, but will local officials be willing to sustain still higher system costs?

There are no easy answers to this question of specialized versus public systems. Various rural systems that will be instituted during the next few years may indicate that one of these approaches is superior. It is more likely, however, that the variety of local conditions that exist in rural areas will ensure that success stories will be told both about large systems that serve the general public and about specialized services that serve a restricted group.

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