transit assistance, the administration of that program must be carefully considered. We now know enough about transit assistance programs in rural areas to know what we do and do not want. We want the following:

- 1. The ability to innovate. System designs do not come from the top down, they come from the grass roots. Let local communities be flexible about how the funds are spent, which local transportation providers are included in the system, and how funds are divided between capital and operating expenses.
- 2. Sufficient staff. Whatever combination of federal and state agencies runs this program, they must have sufficient staff to make it work quickly and well. A rural transit assistance program will involve from three to four times the number of applications now processed by UMTA for urban areas.
- 3. Front-end money. The planning and administrative expenses that are necessary before vehicles start running must be eligible for assistance. This means federal assistance in many instances, at least until fledgling state agencies mature and develop funds of their own.

We also know what we do not want:

- 1. We do not want time gaps between the passing of legislation and spending the first money.
- 2. We do not want delays in processing applications for capital or operating assistance.
- 3. We do not want application packages that require extraordinary skills to fill them out or multiyear needs studies to justify them.

In all our efforts, let us remember that we started by trying to make rural areas better places in which to live. This does not mean developing a multidisciplinary planning infrastructure for each of the more than 3000 rural counties in the nation. It does mean keeping foremost in mind the limited resources of most rural counties and the seriousness of their transportation needs.

REFERENCES

- J. E. Burkhardt and A. M. Lago. Methods of Predicting Rural Transit Demand. Pennsylvania Department of Transportation, April 1976.
- F. Byrne and E. S. Neumann. Feasibility of Developing Low-Cost Measures of Demand for Rural Public Transportation. Engineering Experiment

- Station, West Virginia Univ., Aug. 1977.
- D. T. Hartgen and C. A. Keck. Forecasting Dial-A-Bus Ridership in Small Urban Areas. TRB, Transportation Research Record 563, 1976, pp. 53-62
- W. W. Millar and W. R. Kline. Operating Costs and Characteristics of Selected Specialized Transportation Services for Elderly and Handicapped Persons in Rural and Urban Areas. Proc., Transportation Research Forum, Vol. 17, 1976, pp. 484-490.
- J. Misner and R. Waksman. Service and Cost Characteristics of Small-Community Transit: A Tentative Overview of Operational Results. TRB, Special Rept. 164, 1976, pp. 143-153
- Special Rept. 164, 1976, pp. 143-153.
 6. R. Briggs. Specialized Transportation Providers in the Context of the Transportation Complex: The Characteristics of Local Passenger Transportation Providers in Texas. Paper presented at the 57th Annual Meeting, TRB, 1978.
- K. P. Ceglowski, A. M. Lago, and J. E. Burkhardt. Rural Transportation Costs. TRB, Transportation Research Record 661, 1978, pp. 15-20.
- Rural Transportation in Pennsylvania: Problems and Prospects. Governor's Task Force on Rural Transportation, Harrisburg, PA, May 1974.
- 9. J. De Weille. Quantification of Road-User Savings. Johns Hopkins Univ. Press, Baltimore, MD, World Bank Occasional Paper No. 2, 1976.
- J. D. Burkhardt and W. W. Millar. Estimating Costs of Providing Rural Transportation Service. TRB, Transportation Research Record 578, 1978, pp. 8-15.
- A. M. Lago, K. P. Ceglowski, and J. E. Burkhardt. A Study of Non-Urbanized Area Transit Assistance Requirements. Ecosometrics, Inc., Bethesda, MD, May 1977, pp. 67-71.
- B. O. Bair and D. J. McKelvey. Analysis of State Transit Funding Methodologies. Center for Urban Transportation Studies, Univ. of Iowa, Feb. 1976.
- 13. Public Transportation Operating Assistance: Programs in New York State. New York State Department of Transportation, Oct. 1976.
- 14. Cost Increases, Cost Differences and Productivity of Transit Operations in New York State. New York State Department of Transportation, Preliminary Research Rept. No. 984, Oct. 1975.
- R. H. Bruton. Rural Transit Operations and Management. Office of the Secretary, U.S. Department of Transportation, 1973.

State Role in Rural Public Transportation

Alice D. Garland and Richard Garrity, Public Transportation Division, North Carolina Department of Transportation

This paper reports on the efforts of various states to be more deeply involved in providing transit services in rural and small-town areas. Current state involvement, innovative programs initiated in a few states, existing problems, and future programs are discussed. Most of the information

presented in this paper was obtained from a survey of all states by the North Carolina Department of Transportation. The survey results suggest that one of the most significant problems to be solved is the fragmentation of services due to the multiplicity of federal programs fund-

ing rural transportation—until now an issue usually dealt with at the local level.

Except for a few innovative programs, rural public transportation has been synonymous with human services transportation, designed to provide transportation for clients to programs administered by local human service agencies. This human service orientation has been due to the fact that the various federal social service programs funded by the U.S. Departments of Health, Education, and Welfare and Labor, and the Community Services Administration allow for the expenditure of funds for transportation. Interestingly, the U.S. Department of Transportation (DOT) has been relatively uninvolved in rural transportation, funding only demonstration and elderly and handicapped projects. Although funding is available for capital acquisitions, these funds have almost exclusively gone to small urban transit systems.

In the past few years, however, the elderly and handicapped program (i.e., section 16b2), which provides capital assistance to private, nonprofit organizations, now requires that the applicant prepare a transportation development plan (TDP). This plan should outline the anticipated use of the vehicle and its incorporation into other local transportation systems. The state agencies-primarily state departments of transportation-administering the 16b2 program are responsible for ensuring that the required planning is done. DOT made Urban Mass Transportation Administration (UMTA) section 9 funds available to states for such planning. The states have used these funds for statewide elderly and handicapped planning, regional or county TDPs, or as pass-through monies to allow local areas or consultants to do their own planning.

These planning efforts represent the first comprehensive examination of human services transportation in rural areas. For the first time, one state agency is in a position to deal with one of the biggest problems in rural transportation—the fragmentation of services due to the multiplicity of federal programs funding rural transportation, heretofore an issue addressed only at the local level.

In light of the changing role of the states in rural transportation, this paper summarizes current state involvement, highlights innovative programs initiated in some states, identifies some existing problems, and suggests areas of future state involvement, particularly with respect to efforts toward the coordination of transportation resources. The information presented in this paper has been obtained from a survey of the states completed by the North Carolina Department of Transportation in February 1978 (1).

OVERVIEW OF STATES' ROLE IN RURAL TRANSPORTATION

The states have been involved in a number of areas in rural transportation ranging from planning to operations. Most of this involvement has come about from the state administration of federal programs; the General Accounting Office has identified 114 programs that fund transportation (2). This multiplicity of programs administered by a multiplicity of federal agencies—each with a different state counterpart—has contributed to the failure of most states to take a comprehensive approach toward the provision of rural transportation.

As noted earlier, the states have been given the responsibility for ensuring that the necessary planning requirements of the UMTA section 16b2 program are met. Most, if not all, statewide transportation needs'

assessments and transportation resource inventories are a result of this new responsibility. Thus, the states have assumed major planning tasks previously performed by local or regional agencies. The states are filling a gap left by the lack of local expertise in rural transportation because local human service agencies, and not transportation agencies, are providing the transportation services.

State departments of transportation have accepted other roles in addition to planning, including funding assistance, management and operations assistance, program administration, and state efforts at program coordination. Sixteen states either provide rural transportation services or provide operating subsidies to rural systems; only seven states provide staff for technical assistance in the areas of management and operations.

Sixteen states have taken positive steps to foster coordination of transportation resources by coordinating transportation funding at the state level or by coordinating resources at the local level. Among these actions are many innovative approaches to rural transportation.

INNOVATIVE PROGRAMS

Several states have led in the development of innovative rural transportation programs and policies. The major distinguishing factor in their efforts is the financial commitment of state funds. Considering the lack of a comprehensive rural transportation program at the federal level, these innovative state initiatives become crucial to the development of rural systems.

Delaware

The Delaware state legislature created an authority for specialized transportation, Delaware Authority for Specialized Transit (DAST). DAST operates with state funding and with contracts from human services agencies. The service operates statewide, is demanderesponsive with a 24-h advance call requirement, charges agencies by the hour, and coordinates special services statewide. DAST also contracts with taxis for some service. It is felt that Delaware's success in coordinating human services transportation has been due to the establishment of a separate transportation entity to provide service.

Michigan

The Michigan state legislature earmarked $\frac{1}{2}$ cent of state gasoline tax for public transportation. For rural areas, Michigan's department of transportation established a small-vehicle program that had three options:

- 1. Dial-A-Ride Transportation (DART) must be a full general public transportation system accessible to the handicapped. The local government must put up \$1000; the state pays the rest. After the first year, if the local government opts to continue, the state pays one-third of the operating cost and 100 percent of the capital cost. The system can be operated by a local taxi company under contract to the city.
- 2. Elderly and handicapped transportation is an option for cities not wanting full general public transportation; it includes operating funds.
- 3. Section 16b2 is for providers serving the elderly and handicapped; it includes capital funds only. However, 16b2 operators are encouraged to get out of the transportation business and instead enter purchase-of-service arrangements.

These three programs allow a wide range of options to local communities and provide for a progression from essential service to general public service.

Minnesota

The Minnesota legislature initiated a \$4.5 million paratransit demonstration program. The program is open to public and private agencies. The purpose is to plan, promote, demonstrate, and evaluate the effectiveness, cost, and efficiency of paratransit. A major objective is to increase the mobility of the transportation disadvantaged. In addition, the legislature has allocated \$1.5 million for ongoing operating assistance to paratransit programs.

West Virginia

The Department of Welfare administers the Transportation Remuneration Incentive Program (TRIP), a state-wide demonstration to establish ways to improve transportation for the elderly and handicapped. TRIP has two aspects: one involves selling books of tickets at reduced prices that are good on any form of authorized transportation, such as intercity buses, taxis, and public transit systems to go anywhere, as long as the fare was paid in West Virginia; the second involves setting up regional fixed-route transportation systems that will form the basis of a statewide public transportation system. TRIP has not been used widely by the human services agencies, but it is hoped that such use will increase.

California

In 1975, the California legislature established state demonstration funding for a variety of public transportation programs. Funding is available and has been used for rural projects, which must include dial-a-ride services and other paratransit systems capable of offering flexible scheduling and routing and capable of being operational within six months of project approval. Nearly all of the projects funded to date demonstrate the feasibility of coordinating services for the transportation disadvantaged who receive assistance through various human service programs.

In addition, the state makes money available to transportation from a retail sales tax (0.25 percent of 1 percent) that counties may impose. In rural areas these funds can be used for public transit capital, operating and planning expenses, and street and road construction.

Oregon

For many public transportation and human service providers, obtaining sufficient insurance at a reasonable cost can be a real problem. The problem compounds itself (a) when two different agencies use the same vehicle but at different times of the day or week, or (b) when two distinctly different client groups are transported on the same vehicle but at different times. Oregon has taken a positive step to combat this problem.

Spurred by the increased difficulties of private, nonprofit corporations in obtaining insurance in Oregon, a committee known as the Oregon Special Service Association (OSSA) was formed to find a solution to the problem. OSSA immediately adopted the strategy of increasing acceptance of special transportation through the establishment of a strong safety program enforced through self-policing. OSSA members would be re-

quired to adhere to a uniform set of policies regarding driver selection, vehicle maintenance, and ongoing safety programs. The concept was to make the liability associated with special transportation as attractive as possible through the economic leverage of wide membership and a safe driving record.

OSSA then hired an insurance agent of record or broker to transform this concept into reality. The agent was responsible for marketing the combined risk and translating one group policy into coverage for many agencies. One of the more difficult tasks was finding an insurance company that was interested in providing the coverage. An Oregon-based company finally accepted the business. Rates were agreed upon and varied according to age, value of vehicles, number of drivers, and type of agency programs. The rates resulted in considerable savings to some of the member corporations. Coverage offered includes the following: \$100 000/300 000 liability, comprehensive, and collision with \$250 deductible, and nonowned automobile.

COORDINATION OF RESOURCES

Because of the varied transportation-funding sources, regulations, and administering agencies, coordination of the resources is crucial to the operation of efficient and effective transportation programs. In the absence of a federal mandate on coordination, the impetus for coordination can and needs to come from the state level, i.e., the state agencies administering the federal programs. Several states have taken the lead in developing a state coordination procedure.

Iowa

The Iowa state legislature amended the Code of Iowa to require any state agency administering transit funds to submit all funding requests through its clearinghouse and the state department of transportation. All transportation funding must be in compliance with the State Transit Plan. This represents a new requirement for human service agencies; therefore, the state department of transportation has begun a vigorous campaign to first inform administering agencies of their responsibilities and then to enforce the intent of the legislation. The Iowa Department of Transportation has designated one agency in each multicounty region as the transit authority. Eventually all transportation funding will go to that one provider agency.

Maine

In 1975, the commissioner of the Maine Department of Human Services requested that all state departments and community agencies involved with transportation services work aggressively toward the consolidation of all transportation programs within the same geographical area. Efforts aimed at creating coordinated transportation systems have resulted in nine regional programs serving 16 counties. A recently appointed transportation task force oversees the coordination of existing funding sources for transportation. This action has all been handled administratively without an executive order or legislative change.

Michigan

In December 1977, an executive directive was issued to establish a section in the state department of transportation whose responsibility would be to coordinate all expenditures for transportation, including human services programs. Each agency administering a program was

interviewed regarding enforcement procedures and problems that might be encountered. Due to the problem with the awarding of block grants in which transportation is one of a number of fundable programs, it was determined that, before anything could be accomplished, a uniform accounting system must be developed and implemented. Data collected from this system will then be used to make decisions about future funding.

Pennsylvania

The Pennsylvania Department of Transportation created a new Division of Rural and Intercity Public Transportation within the Bureau of Mass Transit Systems. One function of this division is to develop standards and guidelines for administering state and federally funded programs. The division is also providing technical assistance to increase local coordinated systems. The state transportation department also has developed an executive order on coordination that it hopes to have adopted soon.

South Carolina

The South Carolina state legislature amended the State Highway Act to create the Department of Highways and Public Transportation and to create within the department the Interagency Council on Public Transportation. The council has the responsibility for coordinating all public transportation resources. Any local or regional agency requesting funds from a state agency must file the application with the A-95 office. The A-95 office flags all requests that might include funds for transportation and directs them to the council staff. The council staff then sends out a questionnaire to the applicant that asks detailed questions concerning the project. The applicant has 20 days to respond. The council then acts on the application. To date, nonapproval by the council has meant nonapproval by the funding agency.

South Dakota

A transportation planning and coordinating task force was established to study the potential for coordinating transportation services provided by state agencies. The task force recommended that the state department of transportation should be the coordinating agency and that the task force should continue operating in some capacity. Currently the task force reviews, discusses, rates, and selects transportation proposals submitted to the various agencies. State agencies that have a transportation element in their programs are represented on the task force; this eases verification of sources of funding contained in the applications.

Other States

Both North Carolina and Utah use an interagency review committee to review and select proposals for UMTA 16b2 applications. In North Carolina, the governor's committee on rural public transportation has recommended that grant review approval of the interagency committee be extended to all grant programs funding transportation.

A resource advisory group for human services transportation has been organized in Texas. This group encourages joint planning, coordination, and program development of human service-related transportation systems; makes information about funding available to human services transportation providers; and works

toward standardizing the interpretation of regulations and reporting requirements.

PROBLEMS

The questionnaire that North Carolina administered asked the states to highlight their findings in examining transportation problems of rural and small communities. Several themes repeated themselves from state to state. The major finding is that there is an absence of public transportation in rural and small communities, with the exception of taxi operations. The transportation provided by human service agencies is often the only available service. Consequently, lack of coordination among providers compounds the problem. Stuart Gwin of the Idaho Transportation Department summarized this problem: Too many categorical programs provide limited service to small client groups without concern for other provider organizations. Gwin noted that the millions of dollars now being spent for these categorical programs could be used to provide very good rural public transportation to all our rural residents and not just a few who qualify for programs.

Coordination, then, becomes crucial in rural and small community transportation and is the area deserving the greatest attention. In many rural areas the transportation resources of human services agencies are probably sufficient to meet the need. However, lack of coordination, inefficient operations, and duplication of service keep these resources from meeting their full potential. The increased transportation planning being required by DOT for its programs should lead to greater coordination.

Other problems cited evolved from the dependence on human service transportation. Misunderstanding and misinterpretation of program regulations have caused much confusion about what can and cannot be done with program funds or equipment purchased with program funds. Also, providers tend to underestimate their own transportation cost by excluding certain items such as administration. This makes agencies wary of contracting with other agencies or providers for service at what appears to be a higher cost. Finally, program funding limitations exist such as the fact that 16b2 provides only capital assistance. Basically, human service programs have made it much easier for a local provider to purchase a vehicle than to purchase service.

Those states that have initiated innovative services, either statewide or project by project, responded that the major stumbling block to rural transportation is the cost of service, which must be borne by local government with fares and by agencies. In fact, Michigan's transportation department felt that without state funding support, their small-vehicle program would never have begun because there is no federal funding available to cities of less than 50 000 population for operations aside from the various human services programs. The communities cannot support the services on their own. Thus, states must be willing to make a major financial commitment if they desire to establish public transportation systems in rural and small community areas.

Additional comments were that

- 1. There is a strong need for community support for a transportation system to succeed.
- 2. Florida's transportation department feels that a rural system must have a large demand-responsive component to be effective, because fixed routes can be applied in only a few circumstances.
- 3. States should do whatever possible to maintain public carrier service in rural areas.

4. The elderly, handicapped, and those without automobiles are the ones who really suffer in the complete automobile-oriented society that characterizes rural and small communities.

POSSIBLE STATE ACTIONS

The states can take actions to correct the lack of resource coordination and the lack of funding. The states must take action in the area of coordination. State agencies administering the federal programs can greatly affect the operations of local transportation systems through their funding decisions. First, state agencies need to recognize this power and, second, they must use it to the best extent possible to encourage maximum or efficient use of all resources.

Currently, local providers have taken little action to coordinate their transportation with other local agencies, especially when they are able to serve their own clients sufficiently. There is much the state can do to provide the appropriate incentives. First, the state can educate local agencies on the benefits of coordination, including potential cost savings and the ability to serve more clients. States should also work closely with local elected officials, who may be providing the local match for the federal grants. If the elected officials can be shown the benefits of coordination, then they can encourage the local agencies through their funding decisions.

All state agencies can require prior planning as part of the application process. For example, the development of a TDP by local agencies should bring about a realization of the true amount and extent of available public and private resources. The process will result in a plan of operation that accounts for efficient use of all available resources. Thus, the preparation of a TDP should enlighten the local agencies, should give them a plan of action based on coordination, and should give the state funding agency a sound basis for making its funding decision.

The state can also coordinate its own transportation funding process—perhaps the most important action. Currently, the various state funding agencies make their decisions unilaterally. These independent decisions often impact on one another because a local agency may apply to one state agency for capital funds and another for operating funds. Negative impact could be greatly

lessened, if not totally avoided, by coordinating the state decision process. Furthermore, the current situation in which a multiplicity of funding agencies exists does little to encourage local providers to coordinate their own transportation systems. If the state coordinates its funding process and has good knowledge of the available local transportation resources through the TDP or some other source, then it can encourage the efficient and full use of current resources before funding any new resources.

There are several methods by which the state can coordinate the funding process, including giving funding authority to one state agency or using an interagency committee to review all program applications. Examples of states that implemented coordinated approaches have been cited earlier in this paper. States can adopt one of these approaches or an approach based upon a combination of methods. A coordinated approach to the funding decision process at the state level should lead to more coordination of resources at the local level.

States can also have a great impact on funding. For the most part, states help match federal grants. Only a few states, as described above, have chosen to provide significant state funding programs. Nevertheless, these states lead in innovative rural transportation programs. Local governments are often hard pressed to fund services such as water and sewer, and would find it even more difficult to fund rural transportation. If the states want to see innovative rural programs, then they must be willing to provide operating funds. However, the advent of the new federal rural transportation program should improve the overall funding situation.

The states have a great deal of flexibility in the manner in which they administer federal programs. Each action discussed here is within the capabilities of the states. It is a state decision to determine what role it wants to play in rural transportation.

REFERENCES

- Transportation Options for Rural and Small Urban Populations in North Carolina, Vol. 1—Summary. North Caroline Department of Transportation, Raleigh, Oct. 1978.
- Hindrances to Coordinating Transportation of People Participating in Federally Funded Grant Programs.
 U.S. General Accounting Office, Vol. 1, Oct. 1977.

Rural Development Policy and Rural Public Transportation

Ira Kaye, U.S. Department of Agriculture

The transportation systems that serve rural people and their communities continue to dwindle. Local communities affected by the diminution of these transportation resources are under pressure to raise local money to subsidize, almost simultaneously, air service, rail service, and intercity bus lines, to maintain their off-system roads and bridges in usable condition, and to provide whatever forms of public transit may be achievable. The competition for local funds is among the problems to be faced if a small-town and rural-area public transit program is, as seems likely, at last obtained from Congress. Because the lack of accessibility

to jobs, training, and other essential services will continue to be a major obstacle to a rational rural development policy, comprehensive planning and the maximum feasible coordination of transportation resources must be given high priority.

Recent developments in rural America require closer analysis than they have received. The steady migration of people from rural areas to the cities that has char-