Alternative Responses to the Need for Intercity Buses in Rural Areas

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ABSTRACT

The impacts of the Bus Regulatory Reform Act of 1982 on service to residents of small communities must be viewed not just in terms of numbers of abandonments but also in terms of the level and type of replacement service available to such communities since 1982. This paper focuses on service to independent small towns in nonmetropolitan areas and the following are considered: (a) the level of replacement service directly stimulated by the act, (b) the nature of publicly sponsored alternative service, and (c) broader based programs that deal with the more fundamental questions regarding the nature of public demand for intercity bus service in rural areas. The adequacy and consistency of these various responses are then assessed. Research based on a review of available reports and hearings and supplemented by a series of telephone interviews conducted in June and July of 1985 with representatives of state transportation departments and state public regulatory agencies led to the following conclusions: (a) the potential for using publicly funded rural transit as an alternative form of service or as a feeder service has not been consistently explored by the states, nor has there been sufficient determination to use state programs to bolster the federal Section 18 program; (b) if effective intercity service is to continue in rural areas, a clear indication of public demand for that service and a public willingness to help meet that demand will be required; and (c) avenues for public-private partnerships are available, but in a deregulated environment they will not be explored unless communities can demonstrate demand and private companies can perceive the potential for profit.

The intercity bus has long been associated with the need for affordable transportation among residents of small communities. According to one study, 71 percent of the bus stops in a 12-state sample were in communities with populations under 2,500. The flexibility and relatively low start-up costs associated with bus operation were largely responsible for its introduction in the early 1900s as a means of filling gaps between rail lines and its rapid expansion in the 1920s as a substitute service for rail in low-density areas (1,pp.36-38). Efforts of the Interstate Commerce Commission (ICC) to regulate the expanding bus industry on the federal level in the 1930s stimulated concern about whether regulation would affect service to small communities. As one opponent of regulation commented in 1930, "Competition on various bus routes should be allowed for some time to come so that . . . bus service may be established in every district, rural as well as urban, throughout the country for the benefit of the public at large" (2,p.7). The Motor Carrier Act of 1935 did limit competition but did not impede the expansion of service to small communities. By the 1940s those communities were linked by a national network (3,p.27).

When cuts in bus service to small communities came in the 1960s and 1970s, they came in response to declines in ridership precipitated by the rise in availability of the automobile. Despite the complexities in exit requirements instituted by the Motor Carrier Act of 1935, service to an increasing number of small communities was terminated. Between 1969 and 1979 more than 185 locations lost service and new stops were only added in the suburbs (1,p.42). One case study noted that by 1978 only 42 percent of the small towns sampled had access to intercity bus service (4,p.4). Even with these cuts, bus industry profits continued to decline and the repeal of federal regulations was urged to permit route reorganization and open competition. Again, discussion revolved around potential impacts on service to small communities. "Loss of this service could prove to be devastating not only to individual bus riders who depend on the service, but to communities at large who are finding themselves increasingly isolated particularly in light of diminishing airlines and Amtrack availability" (5). Others countered with, "in the near term service to small towns seems no more threatened than to larger cities," and on the basis of available financial data, "the bus industry is healthier in rural areas than in highly urbanized areas" (6). The impact of bus deregulation has been carefully monitored since the Bus Regulatory Reform Act (BRRA) was passed in 1982. [The Motor Carrier Ratemaking Study Commission was requested to monitor the impacts on the aged and small towns. AASHTO has also monitored site abandonments as has a team of researchers from Indiana funded by the U.S. Department of Transportation. Private studies have also attempted analyses of deregulation.]

Abandonments of stops have apparently been distributed indiscriminantly in terms of the proportion of senior citizens or low-income residents in the towns losing service, but they have been concentrated disproportionately in smaller communities with populations below 2,500. During the first year following implementation of the BRRA, 82 percent of all abandonments were in communities in this population class (7,p.33). Seven hundred seventy-six points

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outside metropolitan areas were abandoned in the first year of deregulation. These abandonments were not unexpected because the intention of the BRRA was to grant private providers the right to reorganize their routes and maximize profits or at least cut losses. The BRRA also held out the hope of alternative service for small communities. During the hearings in 1982 Cornish Hitchcock, Director of the Transportation Consumer Action Project, pointed out, for example, that since there are no economies of scale in the bus industry, small companies can compete adequately with large (1,p.85). Economists agreed that the dominance of two large firms in the busy industry was not a result of market forces but rather an artifact of regulation (1,pp.34-35).

The impacts of the BRRA on service to residents of small communities must, therefore, be viewed not just in terms of numbers of abandonments but also in terms of the level and type of replacement service available to such communities since 1982. This paper focuses on service to independent small towns in nonmetropolitan areas and considers, first, the level of replacement service directly stimulated by the act; second, the nature of publicly sponsored alternative service; and, third, broader based programs that deal with the more fundamental questions regarding the nature of public demand for intercity bus service in rural areas. An attempt will then be made to assess the adequacy and consistency of these various responses in meeting the need for continuing service in rural areas. Information was gathered through a review of available reports and hearings and supplemented by a series of telephone interviews conducted in June and July of 1985 with representatives of state transportation departments and state regulatory agencies.

For purposes of this paper, intercity bus service will be defined to include regularly scheduled line-haul service open to the fare-paying public traveling between two or more contiguous cities outside a metropolitan area.

REPLACEMENT SERVICE

Regular-Route Carriers

As indicated, the expectation with the passage of the BRAA in 1982 was that small bus companies that had been prevented from moving in on routes already served by larger carriers would begin operations between smaller cities in rural areas. The experience of the 2 years after deregulation did not confirm that expectation but rather indicated a continuation of trends established long before 1982. There were approximately 21 percent fewer communities receiving service in 1982 than in 1975 and 20 percent fewer communities receiving service in 1984 than in 1982 (7,p.28). The record on replacement service has also not shown a dramatic increase. In the first year after deregulation an AASHTO survey noted that only 60 cities in nine states had received regular intercity bus replacement service. Forty-five of those cities were in the under-5,000 population class. When these figures are compared with the 480 cities losing all service in that year, 405 of which were in the under-5,000 population class, the record is not impressive. Only 7.8 percent overall and 7.3 percent of the under-5,000 population group received replacement service. In addition, 280 cities, 207 of which had less than 5,000 population, had their service cut by 50 percent or more. The record is only partly mitigated by the fact that 128 cities, 69 in the under-5,000 population class, that had not had bus service before gained regular-route service in 1982. In the second year, as Figure 1 indicates, the record improved somewhat to 13 percent replacement overall (117 out of 899) and 11 percent replacement (81 out of 713) for places with populations under 5,000. In addition, 159 new cities (102 in the under-5,000 group) gained service in the second year. [Statement of Francis B. Francois, American Association of State Highway and Transportation Officials, for submittal to the Subcommittee on Surface Transportation of the Senate Committee on Commerce, Science and Transportation relating to Oversight of the Bus Regulatory Reform Act of 1982, Nov. 1983, Nov. 1984.] This record certainly does not represent any improvement over the replacement record from 1975 to 1982 when service initiations equaled 26 percent of terminations (7,p.29).

The Official National Motor Coach Guide (8) lists 54 new bus companies in June 1985 compared with November 1982, but that must be balanced against the 72 bus companies that were listed in 1982 but no longer listed in 1985. This represents a net loss of 25 percent. Granted a quick review of Russell's Guide cannot account for mergers or small companies that

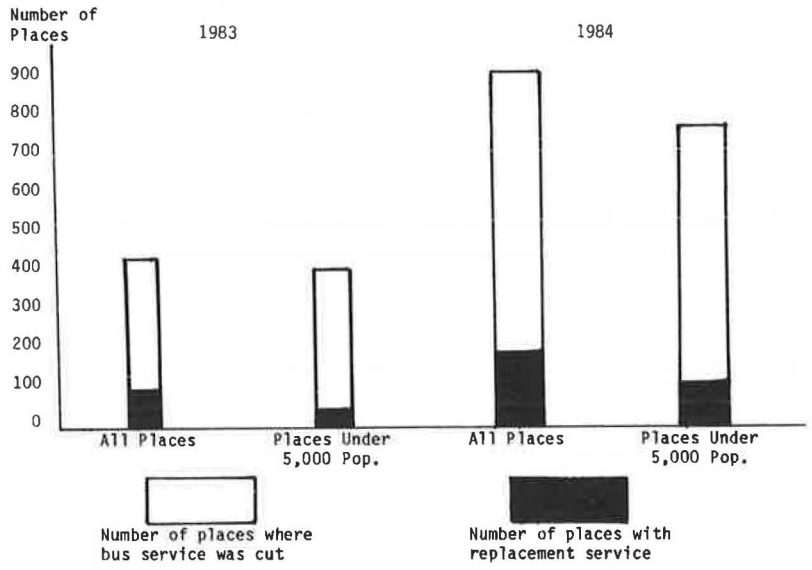

FIGURE 1 Replacement record.

do not choose to be listed, but it does indicate the lack of any abrupt change in the established pattern of bus company entrance into regular-route service.

Most of the places listed in the AASHTO survey as having acquired replacement service were served by expanded routes of existing carriers (9,table 7). Although 225 applications for regular-route authority to operate a total of 46,686 route miles were filed in the first year after bus deregulation, it is difficult to determine the extent to which those applications represented the potential for replacement service to points abandoned by another carrier. Such information is not included on the application forms (9,pp.13-14).

Charter Service

The big gains since deregulation have been in charters. Even in the period before deregulation small non-Class I carriers carried 89.4 percent of the charter and special services (1,p.9). In some states charters had served to compensate for operating non-revenue-producing routes in rural areas. Now that it is no longer necessary to run a regular route in order to be approved for charter service, new charter companies are entering the field at a rapid rate. According to one study, 1,706 applications (88.4 percent of all applications) were for charter authority in the first year of deregulation, 764 by existing firms, and 942 by first-time applicants. This represented a 511 percent increase over the average of the previous 5 years (1,p.75;9). In Ohio, for example, 80 percent of the requests for contract permits were for charter rather than for regular-route service. Indeed, 64 of the 70 bus companies operating in Ohio are charter companies (interview with a spokesman for the Ohio Utility Commission, June 14, 1985). North Carolina has had no requests for service permits except for charters (interview with spokesman for the intercity bus section of the North Carolina DOT, June 13, 1985). New low-cost charter operations with as few as three buses can easily undercut traditional companies trying to balance out losses on a regular route with revenues from a charter service. As a result, small traditional bus companies are apparently being forced to exit from their regular-route services. This observation was made in interviews with representatives of transportation departments in several eastern states but cannot yet be verified by independent data (interviews with spokesmen for rural transportation services and Section 18 in Ohio, Pennsylvania, North Carolina, and West Virginia, June 12-16, 1985). Such developments would certainly have a negative impact on regular-route service to small communities. Increased charter service does not compensate for the loss of intercity bus service in rural areas.

Increased Intermetropolitan Service

The other major trend since passage of the BRRA has been increased service between metropolitan areas over Interstate highways. Almost all state department of transportation representatives underscored this trend, which is understandable given the spirit of the BRRA in which a major thrust is the reduction of cross subsidies between routes or types of service (9,p.22). Nevertheless, it would direct regular-route service away from small self-contained communities. Even if intercity bus service is retained in a neighboring community or out on the highway, there is typically no local transit system linking the points (1,p.83). Fortunately, the Motor Carrier Rate Making Study Commission, directed by the BRRA to study the impact of the act on intrastate services, found that this trend is more noticeable among larger than among smaller bus companies. Because it faces severe competition on its better routes, a small company is not as likely to eliminate marginally profitable rural routes where it has an effective monopoly (9,p.24). Moving into unprofitable routes abandoned by another carrier, however, would certainly provide more of a challenge for a small operator, a challenge that few have accepted.

Industry-Initiated Replacement Service

In April 1985 Greyhound Lines, the giant of the U.S. intercity bus industry, launched a franchise program that it hoped would stimulate greater interest among small operators in assuming marginal rural routes. From 1974 to 1984 Greyhound's ridership plummeted 40 percent and 1984 profits were half the 1974 levels. Faced with these declining profits, Greyhound developed a plan to spin off 10 percent of its routes in the hope that lower cost operators might be able to make money on them. The approach would emphasize short-haul routes of less than 500 mi rather than cross-country through bus service; would provide service at more convenient travel times, albeit with increased transfers; and would potentially serve the needs of residents of smaller communities (10). Franchisees would have the benefits of the Greyhound name, insurance, advertising, sales outlets, driver training programs, management assistance, and maintenance and service. In exchange they would agree to pay a franchise fee of from $5,000 to $10,000 over a period of 5 years for a two- or three-bus fleet, respectively; pay royalties of $200 or 10 percent of profits each month; and contribute to the cost of advertising (Greyhound System Franchise Agreement Packet, pp. 15-18).

It is too soon to determine the success of the franchise program as a stimulant to replacement or retention of service in nonmetropolitan areas. As of July 10, 1985, however, five franchisees were on board and seven franchisees were to be added shortly. One of these was a new bus company; the others represented expansions of existing companies. Because requests for information about the franchise program were coming in at the rate of 15 a day, Greyhound executives were hopeful that other applications would be filed soon (interview with Greyhound representative, July 10, 1985).

Whereas the franchise concept is new to Greyhound, Trailways was encouraging independent non-Class I carriers even before the passage of the BRRA. Between 1982 and 1984 Trailways transferred operating authority to 20 nonaffiliated carriers. More than 50 independent, non-Trailways-affiliated carriers were members of the National Trailways Bus System by 1984. This coordinated network provides the potential for feeder runs to larger carriers and helps supply replacement service to a number of smaller communities. Although 13 marginal route independent affiliates with the Trailways Bus System have abandoned service since 1982, eight new companies have replaced them, according to Russell's Guide (8).

These private industry efforts at generating replacement service are well intentioned but their success must be measured by their ability to generate sufficient profit for all involved, and in the bus industry profits are dependent on ridership. The ability of small communities to generate sufficient ridership to support even the minimum replacement service now provided to them remains to be seen.

PUBLICLY FUNDED ALTERNATIVES TO INTERCITY BUS SERVICE

Publicly funded alternatives to intercity bus service have the advantage of surviving with deficits and consequently have been an approach used extensively in low-density areas. Unfortunately, there is no common or consistent source of information about publicly funded or assisted approaches to intercity bus service. In some cases, only local service providers are familiar with the type and extent of replacement service provided by rural public transportation. In an effort to generate such information a telephone survey was conducted of rural public transportation coordinators and intercity bus coordinators in 15 states. States selected for inclusion in the study had lost a disproportionately large number of bus stops after deregulation. The sample was also intended to reflect a broad geographic distribution and a range of state-sponsored responses to the need for intercity buses in rural areas. Where the coordination of rural and intercity bus services was distributed among two or more individuals, all were interviewed. The interviews were intentionally open ended but followed the general outline indicated in the Appendix. Unfortunately, specific quantitative service data were not available to test the relative success of the programs discussed.

States vary widely in their responses to the need for replacement intercity transportation. Emphases range from state subsidies for replacement service to specialized safety or marketing programs. For other states replacement service is a matter of local prerogative, which is left up to the rural public transportation providers. Among the 15 states surveyed, for example, 3 emphasized a continuing extensive state subsidy system available for intercity service and 3 stressed specialized state programs focused on marketing or safety. In addition, two other states indicated use of federal Section 18 money to assist with operating replacement service and specific routes. The remaining eight states have determined that local communities or counties are closest to the needs of their residents and consequently are best able to determine the extent of the need for replacement service or other rural public transportation services. The local community can then operate feeder lines, stimulate the construction of cooperative terminals, or foster public-private cooperation.

Section 18 as Replacement Service

The one federal program that all states rely on for basic funding of operating assistance for rural intercity transportation providers is the Section 18 funding authorized by the Urban Mass Transportation Act of 1964, as amended. This program, which is funded only at $70 million to $75 million per year, is administered differently in each of the states surveyed. Each of the states submits an annual project plan to UMTA, which reviews the plans only to ensure that they are in keeping with the general purpose of Section 18--to provide transportation to the general public living in rural areas. The directive is so broad as to include the possibility of subsidies for intercity carriers as well as county van service. To date, both capital and operating expenses are allowable although there has been an effort to eliminate operating subsidies much as has been proposed for urban areas. All state public transit coordinators surveyed applauded the Section 18 program and would urge increased funding levels for it. They viewed reports of elimination of operating subsidies with alarm and believed that any failings of the program were due to inadequate funding.

Because of the limited amount of funding available, few states have changed their Section 18 focus since bus deregulation. Among the states surveyed, only two had made changes in their allocations since 1982. Table 1 gives a summary of state Section 18 programs.

Distribution between small urban and rural projects differed among the states although most of the states surveyed allocated about one-third of the funding available to projects in small urban areas and the rest to projects in rural areas. Because awards were based on the merit of specific proposals,

TABLE 1 Section 18 Programs

State	No. of Projects	Area Served	County/Multicounty	Provision for Specific Trip	State or Local Subsidy for Intercity Bus Service	Encourage Linkage with Other Systems
California	100+	Rural and small urban	In county	Some	State subsidy	Not formally
Tennessee	16	11 rural, 5 towns	9 multicounty, remainder intracounty	Not so specified	Only at county level, if at all	Not formally but local effort
North Carolina	12	1 town, remainder rural	Intracounty and multicounty, 1 covers 5 counties	Yes	2 subsidized intercity routes	Not formally but local effort
Georgia	40	Rural	In county	Yes, subscription	No	Not formally
West Virginia	12	Rural and small urban	Most in county, 2 in 5 counties	Not specified	No	Not formally but local effort
Michigan	50	Rural	In county	Not specified	Yes, purchase buses	Initiative by project, local effort
Wisconsin	27	5 cities, 12 rural and rural intercity	Multicounty	Not specified	Yes, some state match	Not formally
Ohio	29	Most rural	In county except special purpose	Not specified	No	No
Pennsylvania	19	Most rural, 5 smaller urban	2 multicounty, remainder in county	Not specified	Yes, state; some piggybacking of funds	Limited, 1 project cooperates with private bus
Louisiana	35	Rural and suburban	2 multicounty, most in county	2 intercity work trips	No	Formal encouragement
Wyoming	5	Mostly rural	Local	University route and ski route	No	No
Kansas	125	Mostly rural	Most in-county, 1 serves 11 counties	Not specified	No	Up to locals
Minnesota	38	Mostly rural	Multicounty, 1 serves 30 counties	Not yet, but working with employees	State needs assessment program	No
Illinois	18	Rural and 5 urban	Multicity, county	Not specified	No	No
Iowa	46	Rural	Multicounty	Not specified	Special UMTA funding with state match	Yes

however, the ratio varied both among states and over time within individual states. Only one state, Wisconsin, was considering establishing a category priority system for distribution of operating subsidies. One plan under consideration in Wisconsin would rank projects as follows: (a) small urban services, (b) rural and Indian services, and (c) intercity services. UMTA is currently reviewing the concept of states setting priorities for distribution of Section 18 funds.

As with any priority-ranking system, there would certainly be protests from those who represent projects with a lower rank. The Wisconsin scheme would assign both intercity and rural projects a lower priority than projects that provide operating funds for small urban areas. This would use scarce resources to benefit the largest number of people and, at the same time, put less emphasis on intercity travel in rural areas. By so doing, the state would mirror preferences of private providers. Only 2 of the 15 states have directly subsidized private intercity service providers using Section 18 funds, and one of these (Wisconsin) is now insisting that private companies present their requests through a local public agency. In three of the other states, funds were distributed to counties that then had the discretionary power to subcontract with private carriers if they believed that was the best way to meet service objectives. The remaining states distributed Section 18 funds to public agencies only on the basis of project proposals. The number of projects funded ranged from 5 in Wyoming to 125 in Kansas with the average about 25. In 10 of the 15 states one or more of the projects served a multicounty area, thereby providing the potential for an alternative to intercity bus service. The other states distributed funds for services that operated primarily within a county. Most of these services did run dedicated trips across county lines but only for such purposes as visiting a health facility, for example, in the Cincinnati and Dayton areas of Ohio. Such specialized services of rural public transportation are, however, more akin to charter services than a substitute for intercity bus service.

The intracounty systems funded through Section 18 include both dial-a-ride and fixed-route systems and provide primarily for nearby shopping, personal business, and medical trips. Although open to the general public, as required in the legislation, most serve primarily senior citizens. In only three of the states were the rural transit coordinators aware of Section 18-funded services being used extensively for work trips.

In North Carolina work trips in rural areas are being accommodated by two subsidized intercity routes that were threatened with abandonment in 1983. One route transports workers from the eastern part of the state to the Outer Banks. This service carries maids and cooks from lower income sections of the eastern shore cities to their places of employment in hotels and restaurants on the Outer Banks. Ridership, which had declined, is now increasing with this regular service. In the western part of the state a route providing the only form of transportation for a rural mountainous area was cancelled and then replaced by a subsidized service now operating with one trip a day at better hours. The operating subsidy in both cases is matched by revenue generated by package express.

Similarly, in Louisiana two intercity projects provide for work trips in otherwise unserved areas, but in this case both routes are directed to New Orleans. One route, which serves low-income workers in the southern part of the state, has an increasing ridership. The other route serves workers from the more affluent suburbs. Section 18 funds pay 50 percent of the deficit of both routes, but, even with this help, the suburban route is soon to raise fares in order to help cover costs.

In Georgia, one county service operates a Section 18-funded subscription service for workers across the Clay County line into Alabama. Other counties also operate intracounty work trip routes in Georgia. In Wyoming, Section 18-funded projects serve two other target groups--college students and skiers.

Where Section 18-subsidized projects serve a multicounty area, there is the potential that they can serve as feeders to bring riders from rural areas to the remaining intercity bus stops along the Interstates. However, only four rural public transit coordinators actually noted formal efforts to generate such transfer points. In Pennsylvania one five-county system was coordinating with Trailways to arrange for a feeder service. Considerable effort was expended on feeder services in Iowa, albeit as a special demonstration using an UMTA grant rather than Section 18 funds. A special state effort is now being made to encourage Section 18 project recipients to include feeders and transfer points in their Transit Development Plans. In Louisiana, also, parishes that are having financial difficulty in running ser ices are advised to cut out service to urban areas and instead link up with Greyhound or other private carriers. In Illinois some rural public transit van programs act as short-distance feeders. In the other states, there were no formal efforts to encourage transfer points, although all surveyed thought that informal connections were possible particularly for outgoing passengers traveling through a county seat that still had intercity bus transportation.

In at least three locations in the sample states public transit providers with strong community support took stronger steps toward cooperation with intercity bus lines. In Cadillac, Michigan; Clarksville, West Virginia; and Wilson, North Carolina; local dial-a-ride systems encouraged transfers by building garages to serve both local and intercity public providers. In Clarksville, Greyhound used the Central West Virginia Transit garage, while Wilson, North Carolina, is using some Section 18 funds with a substantial local match to build a multimodal terminal facility to serve as the central transfer point for the local city bus system as well as intercity bus and taxi. Cadillac, Michigan, secured a $200,000 grant to build a combined terminal for the local dial-a-ride system, intercity bus, and taxi.

The small urban system in Johnson City, Tennessee, made the same type of offer to Trailways. When Trailways threatened to abandon their stop in Johnson City, the city offered to build a terminal that would serve both Trailways and the small 10- to 11-bus city transit company.

Little else has been done to encourage more general feeder programs. Most of the rural public transit coordinators thought that the transfers connected with feeders would discourage rather than encourage additional riders. All but the transit dependent would find transfers most inconvenient. In one location in northern Michigan, however, a substantial group of transit-dependent people continues to transfer buses at 2 a.m. even in the winter.

State Subsidy Programs

According to the Joint Survey on Changes in State Intercity Bus Programs and Policies conducted by AASHTO and the National Association of Regulatory Utility Commissioners in October of 1983, 10 of the 48 states responding indicated that they had an existing state subsidy program for intercity bus transportation. These subsidy or state operating

assistance programs helped to ensure alternative intercity bus service when private intercity bus companies accelerated their retreat from rural areas. Among the states sampled in the current study, California, Michigan, and Pennsylvania had the most comprehensive state programs and all were sufficiently uncommon to warrant further discussion.

In California, the state operating assistance program was well established before the Bus Deregulation Act of 1982. One-quarter of 1 percent of the state sales tax is returned to the counties according to a population-based formula for use for public transit. Only 25 of the 80 intercity bus companies in California are private. When Greyhound announced plans to cancel service to 99 stops, 91 percent of the people affected already had access to public transit. Even had Greyhound withdrawn, the average distance to an intercity bus stop would still have been only 10 mi, which is the national average (11,p.383). Instead of undercutting Greyhound on the same routes, however, some counties provide a user-side subsidy system so that individual riders pay the same price to ride on Greyhound as on the county-sponsored public vehicle. Greyhound then bills the county for the rest of its usual fare.

Similarly, in Pennsylvania, a state subsidy is available for intercity buses. Eleven routes are currently subsidized--four Greyhound, three Trailways, and four independent. To be eligible for a state subsidy, a carrier must serve routes longer than 35 mi, go through at least two counties, and serve a rural population base. For example, Greyhound at first filed to abandon the Philadelphia to Scranton route in 1982. It then withdrew its request in favor of a subsidy of $2.48 a mile to help defray operating costs. The subsidy was to be granted to help cover operating costs as long as the route's revenues did not drop below 40 percent of costs. Currently, Greyhound operates three runs a day over the route.

A complementary Pennsylvania state program, "Section 203," funded through state lottery funds, provides user subsidies for senior citizen trips up to 35 mi in length. Beginning with planning money in 1980, the program has expanded to include 81 transit companies from across the state. It now provides up to 90 percent of the costs of a senior citizen's trip. The additional 10 percent of the fare is usually picked up by an area agency on aging. The program has been most successful at increasing the use of public transportation by the target groups: 95 percent of the riders on the participating services are senior citizens. Other passengers pay up to $10 for unsubsidized trips on the same service. Although the 35-mi limitation does not allow this program to substitute for most intercity travel, it is possible for a senior citizen to use a local cooperating service to travel to an intercity bus stop. In at least one small city, Lancaster, Pennsylvania, schedules are coordinated to encourage such transfers.

In Michigan, the state actually purchases service on intercity routes abandoned by private carriers, provided that the abandoned route was the only form of intercity service for rural residents. These routes are then contracted out on a bid basis to operators who are expected to meet specific safety requirements and to build up patronage within a 2-year period. Because the primary objective is to provide service, the state will pull out of a route if a private operator wishes to serve the same area without any state funding. To date, the program has worked well in sparsely populated areas like the thumb area of the state.

PROGRAMS FOCUSED ON RURAL SERVICE NEEDS

Operating subsidies, whether federal or state, may not necessarily be the long-term answer to the problems of providing intercity bus transportation in rural areas. Continued subsidies may, indeed, only temporarily prop up services that need more serious attention.

As indicated previously, the critical requirement for effective rural intercity bus service is sufficient ridership. As long as ridership continues to decline, continued service cannot be assured. Three of the states surveyed, Michigan, Minnesota, and Iowa, are attempting to address factors that may be contributing to declining ridership. Again, their approaches are sufficiently uncommon to warrant more extensive discussion.

In Michigan, state efforts have concentrated on bus safety and upgrading equipment. The concept is that people are reluctant to ride on old vehicles that may be of questionable quality and potentially unsafe. Consequently, the state department of transportation has launched a program that provides new vehicles to intercity bus lines serving rural areas within the state, in the hope of improving not only safety records but also the image of the system and thereby building confidence in it and encouraging greater ridership.

Participating companies are provided with new buses and a safety certificate that requires them to have safety inspections at a state-operated maintenance facility twice a year. In exchange for the new equipment, the operator agrees to serve particular areas on a regular schedule at least 5 days a week and agrees to pay back the state for the buses over a 6-year period at 5 percent interest. At the end of the 6 years, the title to the vehicle is turned over to the operator. The target group for the program is clearly small intercity bus operators in rural areas. New operators who want to operate along major highways have not been permitted to participate because of limited funds. The program has been credited with retaining continued safe service for workers in northern Michigan where three small companies now operate new buses over scheduled intercity routes. Ridership has increased in northern Michigan and stabilized elsewhere in Michigan.

Another approach to declining ridership has been developed in Minnesota where the department of transportation has launched a targeted market analysis to test for potential ridership in rural areas. The objective is to discuss potential needs for intercity bus transportation with those who are most likely to be affected--the rural residents themselves. Considerable effort is expended through newspapers, radio, and visits to senior citizens' centers to generate group discussions focusing on a number of bus-related issues ranging from changes in schedules and routes to needs for alternative types of service providers and equipment. Reactions of the groups, which range in size from 2 to 40 people, are taped and assessed.

To date, the analysis along one rural route indicated insufficient potential ridership to justify continued service. Efforts are being continued to build focus groups of current and potential riders to consider expanding service on some specific routes and service alternatives on other routes. Currently, the state DOT is also working with private employers and chambers of commerce to generate focus groups of potential riders. The approach has the benefit of gaining information on level of need before an operator invests in a specific route. Naturally, no system can accurately predict ridership, but having a

prereading of the potential and the appeal of specific alternatives appears to be preferable to investing time and energy in a pilot, which would test only one alternative.

Iowa also is moving toward a market analysis approach to determining needs for intercity bus service. In a 6-month period ending in May 1985 the Iowa DOT, assisted by an UMTA 4-I project grant, tested five types of feeder service ranging from taxi and van to connecting bus service. The program featured aggressive marketing of the feeder services including radio and television spots, local newspaper features, and presentations in senior centers and service clubs. Handouts and television spots announced an 800 toll-free number for free information on connecting services and towns. Despite all efforts, however, the program generated only about 125 riders per month. Envisioned as an opportunity for rural riders to reexperience bus travel, the feeders actually only served as a replacement service for one town. For other towns the feeders reintroduced the intercity bus to residents who had not had that option for as long as 15 years. The disappointing responses may have been attributable in part to this introduction of a "new form" of travel after residents had become accustomed to automobiles or shared-ride travel.

Unlike the Minnesota program, these pilot feeders were expected to generate their own demand. No needs studies or focus groups preceded their introduction. The experiment showed the need for such pretests and Iowa now plans to develop focus groups and market analysis as a preliminary step in determining interest in specific feeder routes.

Local Efforts

Efforts to stimulate ridership are not limited to the state level. A number of local efforts sparked by chambers of commerce have been noted as well. In Georgia, the DOT reported numerous promotions organized by local merchants to encourage riding county buses. One of the most determined and thoughtful efforts was in Fort Bragg, California, where the city effected a positive schedule change. The bus had run from Fort Bragg to San Francisco in the morning and returned in the evening, a schedule that was most agreeable with workers and shoppers, but layover costs for the driver led the company to reverse the schedule and ridership from Fort Bragg plummeted. Community interest was sufficiently high that the chamber of commerce agreed to pay the driver's layover cost so that the original schedule could be restored.

Unfortunately, no before-and-after ridership reports are available to compare the relative success of these various programs or to compare the level of ridership on these services with that on similar systems in areas without a major effort to improve ridership.

ASSESSMENT

The lack of comparable quantitative data on ridership by route clearly limits the depth and accuracy of assessment of the adequacy of responses to the need for continuing intercity bus service in rural areas. With deregulation, requirements for regular consistent record keeping have been reduced, which makes the task of analysis even more complex. Nevertheless, some observations may be derived from the foregoing descriptive account of private and public efforts to provide replacement service to small communities. These observations include first, a prognosis for replacement service; second, a review of the potential for rural public transit as an alternative; third, an overview of the potential for public-private partnership; fourth, a request for more information on the demand for rural service; fifth, a review of the role of federal subsidies; and, finally, an overall conclusion.

Replacement Service

Clearly, it is unrealistic to expect that bus companies can be forced to retain unprofitable stops. The belief that easing requirements for entry into service will generate large numbers of replacement carriers to pick up marginal stops also appears to be unrealistic given the experience of the past 2 years. Replacement levels will probably remain about as they are. Spinning off unprofitable or marginal routes in the hopes that other firms with lower costs will be challenged to and be able to make them profitable also appears to be a rather unrealistic solution to replacement service, although there has not been sufficient time to test this concept. Local companies might be able to operate at more convenient times thereby generating a somewhat higher ridership, but most intercity routes in rural areas are destined to operate with relatively low ridership and marginal profits. The BRRA removes much of the incentive for cross subsidizing such rural routes through charters because small companies can enter the more profitable charter service without any obligation to also run a rural intercity route. It is not surprising that a major development since the BRRA has been the increase in new charter companies. With BRRA there is also little incentive for companies to enter the rural intercity market when a combination of charters and express or subscription service holds a far greater possibility of profit with the same capital investment as for a rural intercity route. In some areas small companies that had used charters to cross subsidize rural routes have found that with BRRA new firms that are exclusively charter are undercutting their traditional charter business and jeopardizing their efforts to continue unprofitable rural routes.

Publicly Funded Alternative Systems

The experience of the last 2 years has indicated that continuing to provide intercity service in many rural areas is more of a public service than a target for private enterprise. That would indicate the need for publicly funded forms of alternative service. However, rural public transit as provided in most areas cannot substitute for intercity bus service. In most areas it is operated by a social service agency within a specific county and serves the needs of a specific clientele. As required by federal Section 18 funding, most such services also carry the general public on a space available basis, but operating times and routes make that provision of limited utility to the general traveling public. Rural public transit can only meet the needs for intercity bus service if it travels in sufficiently large multicounty regions and has schedules and routes that appeal to a broad base of the general public.

Public-Private Cooperation

Linking rural public and continuing private service would appear to be a natural solution. This study, however, indicates few efforts to provide feeder programs that would link rural public transit with private intercity buses at continuing stops. In most states there is no encouragement for feeder programs and transfers are arranged only on an informal basis for specific passengers. Such systems work to some degree for outgoing passengers but make a return trip almost impossible. Only in Iowa was there a major state-initiated effort to encourage feeder programs linking local services with private intercity carriers at locations along an Interstate. The Iowa experience pointed out that feeder systems will not self-generate passengers. A considerable effort in publicizing the program is essential to reassure passengers, especially about the return trip. Any reports of unsuccessful transfers or long waits between vehicles can undo months of effort in generating riders. Only with the full cooperation of all parties including the operators of the transfer stop (restaurant owners, gas station owners, etc.) can such a system work effectively and then only by building a tradition of success can it generate riders. The complexity of operating such a system is enough to discourage some. To expect successful feeder programs to develop on an ad hoc basis by local initiative is unrealistic.

Public-private cooperation in building joint terminals has eliminated a major problem in facilitating transfers through cooperative scheduling and providing a safe, convenient location for the wait between buses. This venture worked successfully in Clarksville, Wilson, and Cadillac, when private companies and the public saw mutual benefit in the cooperative venture. Opportunities for such cooperation are, however, limited.

Level of Demand for Service

Other examples of local initiative working to continue or modify intercity bus service speak to a major factor in providing either replacement or alternative service--extent of demand. Where communities have mobilized efforts to retain service, bus companies have responded positively. It is much more difficult for bus companies or even publicly sponsored services to monitor informal protests or to respond to the needs of individuals.

In general, what is needed is a clearer picture of what type of service is needed and the level of demand in specific rural areas. Ridership surveys have characterized bus riders as primarily those either over 65 or under 18, those with lower incomes, and those embarking on relatively short trips. In general, 16 percent of bus riders are 65 or older, and 33.6 percent are under 18. In 1977, 19.3 percent of bus travelers had incomes under $5,000 and 69 percent traveled less than 600 mi (11). These proportions differ in studies conducted in different states.

Although no separate surveys were conducted of intercity travelers in rural areas, the expectation is that the characteristics of rural residents riding buses mirror the national average, except for perhaps a larger proportion of senior citizens because rural areas are home to a sizable senior population. Studies have focused on proportions of aged and low-income individuals in rural areas with abandoned bus services (7,11), but they can do no more than indicate the level of a pool of intercity bus riders. They do not indicate the level of demand for service. Past ridership figures appeared to indicate a low level of demand, but it is unclear whether those figures represented a response to the type of service provided in the past or to intercity buses in general. The Minnesota effort and the parallel program in Iowa are viable approaches to gaining insight into the level of demand for intercity buses in rural areas--a factor critical to the interest of any replacement service. The Michigan bus loan program is an indication that rural workers will ride a safe, convenient service when offered. The experiment in the Outer Banks of North Carolina reconfirms the popularity of convenient well-scheduled service among low-income rural workers. Efforts in rural areas with less well-defined work destinations have not fared as well.

Farebox charges are another important consideration in determining demand. Both Pennsylvania and California have minimized this factor for senior citizens through state subsidies. Ridership among the rural elderly in those states is relatively high. The Minnesota study, however, indicated that some members of the general public would be willing to pay $1 more than the existing fare if service were reliable and schedules convenient. Obviously, fare levels as well as other considerations must be assessed for each area.

Federal Subsidies

The level of federal subsidy is limited. All states surveyed emphasized the need to continue the Section 18 program. Nevertheless, this program cannot begin to meet the needs of all rural residents. A scattershot effort all over a state is unlikely to create much of an impact. If viable alternative service is to be generated or existing service is to be effectively subsidized, it is important to use the federal money where there is a demonstrated need or demand for service. Only one state, Wisconsin, is attempting to set up a formal priority-ranking system for allocating Section 18 funds. Such a system may well be beneficial as long as priorities are regularly reviewed and are sufficiently flexible to respond to demonstrated needs. Because federal money is limited, it is also critical that it be reinforced by state and local funding if adequate service is to be provided.

CONCLUSION

Two years after the BRRA went into effect it is safe to say that the act has not benefited small rural communities. The hope that ease of entry requirements would generate replacement service was generally ill-founded. What has happened since BRRA in terms of replacement service is similar to what happened before. The potential for using publicly funded rural transit as an alternative form of service or as a feeder service has not been consistently explored in the various states, nor has there been sufficient determination to use state programs to bolster the federal Section 18 program. If effective intercity service is to continue in rural areas, it will take a clear indication of public demand for that service and a public willingness to help meet that demand. Avenues for public-private partnerships are available, but in a deregulated environment they will not be explored unless communities can demonstrate demand and private companies can perceive the potential for profit.

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APPENDIX--RURAL BUS REPLACEMENT SERVICE SURVEY

I. What was the statewide impact of deregulation of intercity buses particularly in rural areas?
   1. How many routes were cancelled in rural areas?
   2. Were there any formal or informal protests? If so, what was the result of the protest?
   3. Have cancelled routes been replaced? If so, how?
   4. Have new companies entered the field? What type? How many?

II. Have there been any efforts to use rural public transportation to replace abandoned routes?
   1. Have Section 18 funds played a role in replacement? If so, how?
   2. Are there any efforts to use rural public transportation systems as feeders?
   3. Are there other efforts to replace intercity bus service?

III. Are there any state programs that have been developed to assist with rural intercity bus travel?

IV. Are you aware of any local efforts to assist with intercity travel?

V. Are there other examples of public-private cooperation in providing for intercity travelers in rural areas?

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