Clinton V. Oster, Jr.

Is Deregulation Cutting Small Communities' Transportation Links?

In the 2 years following deregulation, bus lines abandoned 20 percent of the communities they served, and airlines abandoned 17 percent of the airports they served. But those cuts were not due to deregulation alone. Bus lines were abandoning routes even before deregulation, and nearly three-fourths of the airline abandonments were due to the companies' going out of business, not to their pursuit of more lucrative markets. Cuts in bus service are more serious, however, since people who take buses often lack access to other transport.

Key provisions of the laws deregulating bus and airline services allowed the companies to more readily offer and withdraw their services to communities. That represented a dramatic change in government policy toward transportation industries. The trend for nearly 100 years had been toward more regulation and more Federal involvement. Accompanying the new freedoms offered by the Airline Deregulation Act of 1978 and the Bus Regulatory Reform Act of 1982 was a concern that the buses and airlines might abandon service to small communities.

About 20 percent of the communities served did lose their service within 2 years of deregulation. And most of the communities that lost service were small. But the losses may not be as significant as they at first appear. The abandoned communities generally did not use the service enough to make it profitable to the carrier. Airlines abandoned service to communities that usually had alternative means of transportation. Bus lines abandoned routes that served the occasional, not the frequent, bus riders.

Moreover, not all the abandonments can be attributed to deregulation. Even before the new laws were enacted, the regulatory restrictions were apparently not too strict since buses, and to a lesser extent, airlines, were able to abandon service to some communities. Following passage of the new laws, the national economy went into successive recessions, which forced some transportation companies out of business, especially the small commuter airlines that often served small communities.

Background

Before the 1982 Bus Act, intercity bus regulation by both the Interstate Commerce Commission (ICC) and various State regulatory authorities made it difficult for bus companies to withdraw from unprofitable service to small communities. Small community bus service was also implicitly subsidized. One form of subsidy was the frequent requirement that bus companies provide scheduled service in exchange for the rights to offer more profitable (and less regulated) charter service. Another form of subsidy involved the practice of State regulators to keep fares low in intrastate markets in order to extract subsidies from other passengers paying the higher fares permitted by the ICC in interstate markets. The 1982 Bus Act made it easier for carriers to offer both regular scheduled service and charter service as well as to reduce or eliminate service on unprofitable routes.

The situation was much the same for the airlines. Before deregulation, the Civil Aeronautics Board (CAB) was reluctant to allow carriers to abandon service to small communities even though such service had become increasingly unprofitable. One reason for low profits in small community service was the airlines' conversion of their fleets to jet aircraft. While jets were fast and efficient in medium and long flights, they were poorly suited for the short, low-density service typical of routes to and from small communities. Because of the large quantities of fuel consumed in taking off and climbing to cruising altitude, jets became even more uneconomic in short-haul service following the fuel price increases in 1979.

A second reason was that CAB regulations kept fares low for small-community residents. To make up for losses on the short flights, long-haul fares were pegged with higher markups, with the intent of providing higher profits.

Unlike the bus industry, which collected no direct Federal subsidy, airlines were subsidized to compensate for their losses in serving small communities, but the subsidies were of a form that tended to encourage poorly timed service. Forced to serve small communities, airlines typically used their jets in multistop service from one small community to another during late evening or mid-afternoon hours. Such a service pattern allowed carriers to collect a government subsidy for small community service while keeping their jets available for more profitable service in unsubsidized higher density markets during peak business travel hours.

With deregulation, local service airlines could use their jets far more profitably in longer haul and higher density unsubsidized markets at all times of the day. Airline deregulation thus raised the concern that these carriers and, to a lesser extent, the trunk airlines, might redeploy their jet aircraft to higher density markets and reduce service to small communities.

Bus Service Changes Following Deregulation

Intercity bus service was already in decline before passage of the 1982 Bus Act, according to a 12-State sample of scheduled bus service from 1975 to 1984. Prior to the act, the number of communities receiving scheduled service had declined at an average annual rate of 3.3 percent. As a result of these service declines, there were approximately 21 percent fewer communities receiving service in 1982, just before passage of the act, than in 1975. Following passage of the act, the rate of decline increased sharply, with declines of 9.2 percent from

Clinton Oster is Director of the Transportation Research Center, Indiana University, Bloomington.

1982-83 and 11.6 percent from 1983-84. Thus, in the first 2 years following passage of the act, there was about the same percentage reduction (20 percent between 1982 and 1984) as in the 7-year period before. The total number of communities receiving service in the 12 States examined declined over 36 percent between 1975 and 1984, from 3,609 to 2,288.

The amount of service, as measured by the number of weekly bus departures, also declined, with a somewhat more rapid drop in departures than in the number of communities served. Total bus service dropped at an average annual rate of 4.8 percent before the act (between 1975 and 1982). After passage of the act, service dropped by 16 percent between 1983 and 1984 (fig. 1).

The sharp decline immediately following passage of the act suggests that carriers may have had some "pent up" demand to reduce scheduled service, possibly to deploy equipment into more profitable charter service. Once this pent-up demand was satisfied, however, the annual rate of decline in departures returned to slightly less than its level before the act.

More startling, perhaps, is the steady drop in departures in the 7 years before the act. While State and Federal regulation may have prevented some service cuts during this period, the hindrance was apparently not too severe. The notion that regulation protected communities from service loss is not supported by the experience of these 12 States.

Not surprisingly, bus service abandonments were concentrated among the smallest communities that, because of their size, typically received neither air nor rail service (table 1).

Communities abandoned by bus lines typically had small populations of elderly residents and the highest (or nearly highest) median income of the three groups. That losses in bus service have not fallen disproportionately on the poor or elderly is not surprising since these groups are among the most frequent users of intercity buses. Bus companies would not be expected to cut services to communities populated by high concentrations of their most faithful riders (table 2).

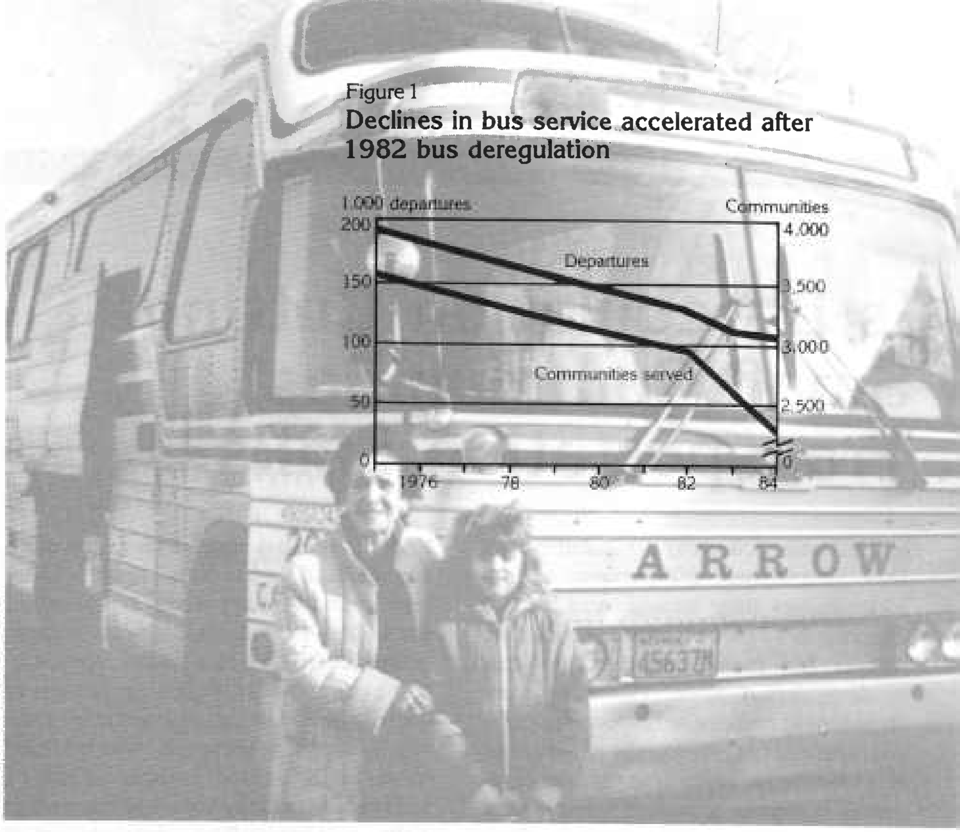

Figure 1
Declines in bus service accelerated after 1982 bus deregulation

Photo by Dick Warren, USDA

Airline Service Changes Following Deregulation

In contrast with the bus industry, the basic pattern of service change following airline deregulation has been an increase in both the number and convenience of flights, but for fewer communities. A survey of air service in the 48 contiguous States indicates airports serving large, medium, and small communities, as groups, were served by more flights in 1983 than in 1978. Small communities—nonhubs—gained the least among the groups, with only about 4 percent more departures in 1983 than 5 years earlier. By contrast, airports serving large and medium-sized cities typically saw service increase by more than 20 percent over the same period. More recent comparable figures are not available, but there is evidence that large cities have continued to gain departures while flights out of small communities are still at about the 1978 level.

Not only did the airlines provide more service, but the service typically involved fewer intermediate stops. Jet carriers sharply increased nonstop and one-stop flights and reduced flights with two or more intermediate stops. Nonstop and one-stop flights are the building blocks with which jet carriers developed their hub and spoke route systems following deregulation. Commuter carriers also shifted their flight patterns by reducing one-stop flights in favor of nonstop service for passengers flying from nonhubs to large and medium hubs to connect to onward flights. Flights to and from small communities also became more

Table 1—Smallest communities form backbone of intercity bus routes

Change in bus service	Fewer than 2,500 residents	Fewer than 10,000 residents
	Percent	
Communities served by busline, 1975	71	87
Communities served by busline, 1982	67	84
Communities abandoned by busline, 1982-84	84	95

Based on 12-State sample.

Table 2—Poorer, older communities hang onto their bus service

Type of service change	1975-82	1982-84
	Median household income	
Abandonment	$15,125	$15,877
Partial loss	$15,255	$15,037
No change or gain	$15,003	$14,908
	Percent of population 65 or older	
Abandonment	12.5	12.2
Partial loss	13.2	13.6
No change or gain	12.9	13.0

These figures represent all the communities in the 12-State sample.

conveniently timed after deregulation as jet carriers were free to stop service to small communities for which their aircraft were poorly suited.

While airline service improved in most small communities following deregulation, 106 airports that received service in 1978 had lost all service by 1983. These 106 airports represented 17 percent of the 618 airports (in the contiguous 48 States) that were served by an airline in 1978. By contrast, there were only 23 airports served in 1983 that were not served in 1978.

Airline service abandonment at over 100 communities is a serious public policy concern and raises two issues: the extent to which airline deregulation caused the abandonments, and the hardship inflicted on the abandoned communities.

Deregulation does not seem to have been a direct (or even an important indirect) cause of airline service abandonments. Of the 106 communities that lost service, 105 had been receiving service from commuter airlines only. Commuters were exempt from CAB regulation prior to the deregulation act and thus would have been free to stop serving those communities even without deregulation. The remaining community, Winona, MN, requested that its essential air service be allowed to lapse. The Essential Air Service program, established under the 1978 deregulation act, guaranteed that small communities would not lose their air service for at least 10 years. Winona residents have convenient access to service in both Rochester, MN, and LaCrosse, WI (both less than 50 miles away).

A more likely cause of service loss than deregulation among these communities appears to have been the recessions between 1980 and 1982. As with other small businesses, many commuter carriers were undercapitalized and some of the financially weaker airlines failed during this period. In fact, 75 of the 106 communities (71 percent) lost service because their commuter airline went bankrupt between 1978 and 1983.

The impact of a service loss on an abandoned community is difficult to estimate. The major reason for abandonment was almost always low ridership. Thus, many of the abandoned communities are very small, within easy driving distance of another airport, or both. Over 27 percent of abandoned communities had populations less than 10,000, and nearly three-quarters had populations less than 50,000 (table 3). Only 7.5 percent of continually served nonhubs had populations less than 10,000, and only 40 percent had populations less than 50,000. By contrast, intercity bus service is much more heavily focused on small communities. In 1982, for example, 84 percent of the communities receiving bus service had populations of less than 10,000 and two-thirds had less than 2,500.

Of probably more importance in assessing loss of air service to a community is its proximity to another airport. If the community is within easy driving distance of an airport in another community, abandonment likely has less effect than if the community is isolated from the Nation's airline network. Nearly 60 percent of abandoned communities were within 50 miles of another airport and 91.5 percent were within 100 miles. Only nine of the abandoned communities, therefore, were more than a 2-hour drive to an airport offering scheduled service and none of the nine were more than a 3-hour drive. On the other hand, 1- to 2-hour drives to the airport are common even for residents of large metro areas.

Some Regions Fare Better Than Others

There was considerable regional variation in the loss of air service. The most severe losses came in the Pacific region, moderate losses in the Mountain region, and less severe losses in the North Central, South Central, Southeast, and Northeast regions (table 4, figure 2). In the two regions with the most serious losses, as well as in the North Central region, over three-quarters of the losses were in communities previously served by a commuter carrier that had gone bankrupt whereas there were far fewer bankruptcy losses in the other three regions.

A much greater percentage of communities lost bus service than air service (table 4). Note, however, that the two regions with the most severe air service losses contained the four States with the least severe bus service losses. With the exception of the Northeast and North Dakota, the regions with more severe than average air service losses had less severe than average bus service losses and vice versa.

These regional differences probably reflect the different markets served by the airline and intercity bus industries and the different demographic characteristics of their passengers. In a 1977 National Travel Survey, for example, 41.6 percent of air travelers had family incomes over $25,000 and 48.8 percent were between the ages of 25 and 44. In contrast, only 13.5 percent of bus passengers had incomes over $25,000 and only 17.4 percent were in the 25-44 age bracket.

Table 3—Nearly 75% of communities that lost air service had populations less than 50,000...

Population	Abandoned, 1978-83		Continually served, 1978-83	
	Number	*Percent*	*Number*	*Percent*
Under 10,000	29	27.3	30	7.5
10,000—25,000	26	24.5	58	14.5
25,000—50,000	23	21.7	72	18.0
50,000—75,000	13	12.3	73	18.3
75,000—100,000	6	5.7	48	12.0
Over 100,000	9	8.5	118	29.6

...and more than 90% were within 100 miles of another airport

Driving distance	Abandoned, 1978-83		Continually served, 1978-83	
	Number	*Percent*	*Number*	*Percent*
50 miles or less	62	58.5	189	47.4
51—100 miles	35	33.0	183	45.9
101—150 miles	8	7.5	25	6.3
More than 150 miles	1	0.9	2	0.5

Many communities are served by multiple airports.
Based on survey of air service in 48 contiguous States.

Figure 2

Surveyed states with lower than average bus service losses . . .

. . . generally in regions with higher than average air service losses

Table 4—Regional variation in air and bus service changes[1]

Region or State	Change in communities served		Difference from U.S. average	
	Air	Bus	Air	Bus
	Percent		*Percentage points*	
Pacific	−30.5		−13.3	
California		−12.6		+16.1
Oregon		−20.8		+7.9
Mountain	−20.6		−3.4	
Arizona		−4.0		+24.7
Montana		−14.4		+14.3
North Central	−13.1		+4.1	
Indiana		−50.8		−22.1
Missouri		−39.3		−10.6
North Dakota		−19.7		+9.0
South Dakota		−29.0		−.3
South Central	−5.6			+11.6
Oklahoma		−39.3		−10.6
Southeast	−3.2		+14.0	
Florida		−36.0		−7.3
South Carolina		−43.4		−14.7
Northeast	−6.8		+10.4	
Massachusetts		−20.9		+7.8
U.S. average	−17.2	−28.7		

[1]Air service changes are for the period December 1978 to December 1983 and bus service changes are for the period July 1979 to July 1984.

Most airline trips are taken for business purposes whereas the intercity bus is rarely used for business travel. A 1987 Wisconsin survey, for example, found that only about 7 percent of intercity bus trips were for business.

Recognizing the differences between the two markets is essential in assessing the effects of changes in service. There is little reason to believe, for example, that the route realignments following airline deregulation adversely affected many travelers going to and from small communities or residents of the small communities. While over 100 communities lost all their air service between 1978 and 1983, over half of these communities were within a 1-hour drive of another airport and nearly all were within a 2-hour drive. Indeed, the proximity to other nearby airports and the small size of the abandoned communities probably hindered these communities from generating sufficient demand to sustain profitable commuter airline service. Given the age and income characteristics of most airline travelers, driving to a nearby airport would not seem to be much of a problem. Loss of airline service affects people who typically have other transportation alternatives. Thus, loss of air service probably does not translate to substantial economic losses for most communities.

The loss of bus service, however, affects a very different group. Over 30 percent of bus travelers in 1977 had annual family incomes of less than $7,500 and 50 percent were either under 18 or over 65 years of age. A 1985 survey of travel patterns in Michigan reveals that bus riders are still much the same as in 1977. Access to autos is much less likely among intercity bus riders than among airline travelers. Moreover, most communities losing bus service were so small that they were probably not served by other forms of public transportation. The loss of intercity bus service may, therefore, restrict intercity travel for the poor, the young, and the elderly who live in very small communities, and who do not have access to an auto. Since bus service is seldom used for business travel, these service losses are unlikely to restrict economic development of these communities. The losses do, however, restrict the mobility of residents who lack convenient transportation alternatives.