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Rail Freight Consolidation and Rural America

Deregulation in the rail freight industry has brought cheaper, faster, safer, and more efficient rail service, but reduced competition in rail service and an increase in the number of abandoned routes have hurt some rural areas. Specific strategies to counter negative effects of rail consolidations are available, including the establishment of small railroads, greater Federal and State involvement, and the Rails-to-Trails program. As the Nation's rail industry becomes more concentrated among fewer major carriers, these approaches are likely to become more important.

The Nation's railroads are booming. Deregulation of the industry in 1980 gave major railroads more freedom to restructure their operations, and many companies have boosted profits by holding down costs. Efficiency has also increased through a number of high-profile mergers (Berndt and others, 1993). Although consolidation, a product of deregulation, is often associated with cheaper, faster, safer, and more efficient rail service, gains have come at the expense of some smaller rural communities, as rail service has been cut back on underused branch lines. Some rural industries that rely on railroads also fear that consolidations may increase their transportation costs.

This article seeks to better explain how consolidations in the rail freight industry have affected rural America. First, a historical overview of the Nation's rail network is provided. Next, the impacts of rail consolidations in rural areas are described and various strategies for dealing with cutbacks in rail service are discussed. The article concludes with a statement of how future consolidations may affect rural areas.

Railroads Have a Long History in America

The first railroad in the United States was the Baltimore and Ohio, which started carrying freight and passengers in 1830. Other railroads soon followed, and by the 1840's, a period of rapid railway building commenced. By the 1860's, the major transcontinental routes had largely been completed, and many rural communities aggressively competed with each other to ensure service. Competing rail companies, anxious to expand their share of the rail network, extended their service to most of these towns, resulting in a considerable amount of overbuilding in the Nation's rail infrastructure, particularly in parts of the Midwest.

Construction continued into the 1890's, and by the early 20th century, railroads had become the dominant means of moving people and freight in rural America. By 1916, the national network reached an all-time peak of 254,251 miles (fig. 1). However, due to the earlier overproduction of rail lines and the popularity of the new local road system, railroads started to lose their dominance of intercity transportation by the 1920's.

In the post-World War II period, railroads continued to decline in relative importance as other transportation modes—trucking, pipelines, waterways, and air transportation—became more popular. Many railroads were also struggling under Federal regulations, with the Interstate Commerce Commission overseeing virtually all freight rates, track abandonments, and merger issues. Regulation stemmed from the Federal Government's concern that dominance of the Nation's rail network in the

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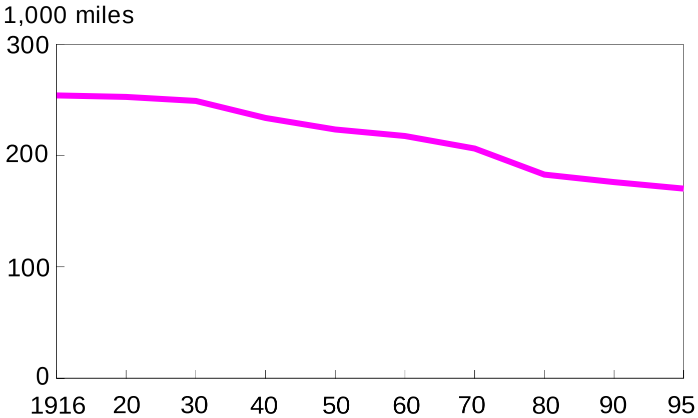
Figure 1
Railroad miles in the United States, selected years, 1916-95
Mileage has declined throughout the century



Source: Association of American Railroads, *Railroad Facts*, (various years).

early part of the 20th century by just a few railroads would hurt rail service and freight rates.

By the late 1960's, many rail lines were struggling with high labor costs, strict work rules, and Federal regulations requiring them to provide passenger service. In 1970, the Nation's then-largest railroad, the Penn Central, went bankrupt. Congress responded by providing $3.2 billion in subsidies to maintain service on what became the Consolidated Rail Corporation (commonly referred to as Conrail). Pressure from the railroad industry also led to passage of the Rail Passenger Services Act in 1970, which established Amtrak and removed the freight carriers' responsibility of providing passenger service (although freight railroads provided track access and personnel to Amtrak). Service on Amtrak began in 1971.

Faced with mounting losses, the Nation's major railroads asked Congress for regulatory relief in the late 1970's, prompting deregulation of the industry in 1980 under the Staggers Rail Act. By allowing railroads to increase their profits and giving them more freedom to set their own routes, rates, and schedules, rail freight service under the Staggers Rail Act has generally become cheaper, faster, and more efficient. And, in spite of recent safety concerns on some lines, the Nation's rail freight network has been safer under deregulation. Shippers and farmers benefited, too, from lower transportation costs (Forkenbrock and others, 1990).

Under deregulation, a number of high-profile mergers have taken place in recent years, as illustrated by the July 1996 $5.4-billion merger between Union Pacific and Southern Pacific railroads, the Nation's largest-ever transportation merger. With a 31,000-mile network, stretching from the Mississippi River to the West Coast, the Union Pacific / Southern Pacific merger created the Nation's largest railroad, which is now one of only two major railroads operating west of the Mississippi. The other is the Burlington Northern / Santa Fe line, also a product of a recent (1995) merger. In the East, CSX and Norfolk Southern appear ready to take over Conrail (as of this writing), pending approval by the Surface Transportation Board (which replaced the Interstate Commerce Commission in 1996 as the Federal agency responsible for overseeing rail merger issues). If Conrail is split up, some have predicted that one more round of mergers is possible, as the two remaining western rail giants (Union Pacific and Burlington Northern / Santa Fe) consolidate with the two remaining eastern rail giants (CSX and Norfolk Southern), leaving the Nation with only two massive rail companies operating coast to coast.

Rail Consolidations May Threaten Rural Economic Development

Consolidations can have a number of negative effects. Farmers, shippers, and grain elevator operators may pay higher transportation rates, and U.S. competitiveness in foreign trade can be impaired. Although trucking remains the primary means of moving farm and food products, its cost per dollar of output is significantly higher than the cost of rail, the second most common mode of agricultural transportation. Barge transportation can effectively compete with railroads, but it is limited to routes served by waterways. Consolidations, especially when they lead to decreasing competition in rail service, therefore, can raise the cost of marketing agricultural products and may reduce agricultural income, raise rural unemployment, and jeopardize economic development potential. The local environment can also become degraded by the use of less energy-efficient modes of transportation, such as trucking. State and local governments could face higher expenditures for rural road and bridge maintenance and lower property tax revenues.

Mergers can also disrupt rail service, potentially threatening timely shipments of agricultural commodities. This was a big issue in late 1997 when shipments on the newly merged Union Pacific and Southern Pacific lines slowed down, initially due to congestion in South Texas. The problem quickly spread to other parts of the Nation's rail network. Transportation officials characterized the slowdown as a "transportation emergency" because of the possible negative effects on that year's record grain harvest.

Reduced Competition

In many rural areas, rail is the cheapest mode of transporting bulk commodities, such as grain or coal. Decreased competition in rail service may increase shipping costs, especially if oligopolistic or monopolistic pricing exists (MacDonald, 1987). The risks of reduced competition are especially significant for communities currently served by two railroads that may lose one of their lines due to a consolidation (Winston and others, 1990). But the evidence on how markets are affected when three railroads reduce to two, a concern for some communities during the recent Union Pacific / Southern Pacific merger, is still inconclusive. While economic theory suggests that two-firm markets might encourage tacit collusion in freight rates, this is often not the case in the rail industry, partly because most railroads appear to remain secretive about their prices and service offerings. Nevertheless, reduced competition in rail service is not a risk-free proposition for most rural communities.

Abandonments

Deregulation gave railroads more flexibility to abandon routes deemed to be unprofitable. Immediately following passage of the Staggers Rail Act of 1980, abandonments increased sharply for major railroads, growing nearly 140 percent during 1980-85 compared with the previous 20 years (although the pace of abandonments slowed considerably during the latter half of the 1980's). But little evidence exists that abandonments have serious long-term economic consequences for rural communities (Due and others, 1990). Most studies of the effects on the community of abandoning rail service show that small communities are usually affected more psychologically than economically (Fruin, 1992). Although abandonments have been found to hurt communities economically in the short run, few communities have been hurt in the long run because reasonably priced transportation alternatives, usually trucking, are almost always available (Due and others, 1990). And although past abandonments have increased transportation costs for some agricultural inputs, most notably fertilizer, the extra cost has been insignificant for agriculture overall, less than 1 percent of total farm production costs (Fruin, 1992).

One of the most detailed community impact studies of rail abandonments was conducted by H. Barry Spraggins. From a survey of 19 abandonments in Minnesota during 1966-75, affecting 43 neighboring areas, Spraggins found that only a few firms and communities were hurt significantly from the loss of rail service. Most businesses in these 43 communities, mainly grain elevators, were not hurt because trucking was an economically viable transportation alternative for short distances. Fairly typical was the experience of Winsted, Minnesota (1990 population of 1,600), which lost service in 1970 when the Chicago and North Western Railroad ceased operations between Golden Valley and Gluek. Located in rural McLeod County, 40 miles to the west of Minneapolis, most of Winsted's rail traffic was agricultural. Although some local businesses, especially food processors, were concerned about the possible harm of an abandonment, Spraggins found no adverse, long-term local impact of the loss of rail service. Most goods were simply shipped 15 miles to the nearest rail facility by truck at no significant additional cost.

Abandonments are usually more common with a parallel merger, one in which consolidating railroads serve many of the same communities, because the new network often entails some overlap in rail service. For example, the establishment of Conrail in 1976 resulted in some small communities losing rail service, such as the northwestern Pennsylvania town of Grand Valley (1990 population of 100), as the Penn Central and smaller lines serving the same region were consolidated into one railroad. In contrast, end-to-end mergers, those in which merging lines serve primarily different regions and communities, usually have fewer abandonments because the new network has less duplication of services among the merging railroads. This was primarily the case when Burlington Northern / Santa Fe was formed in 1995. Since deregulation, most mergers have been end-to-end, suggesting that abandonments since 1980 may have been more numerous had there been more parallel mergers (Berndt and others, 1993).

Passenger Service

Rail freight consolidations may also put rural passenger rail service at risk. Freight railroads own the vast majority (95 percent) of track on which Amtrak operates passenger service, and abandonments by a "host" freight line that owns the track can affect the provision of passenger rail service. The problem for communities losing service in this way is that often little can be done to prevent a freight line from closing a route if it so chooses. This was the case in September 1995 when Batesville, Mississippi, permanently lost its passenger rail service due to a business decision by the owner of the line, Illinois Central Gulf, to move the route westward, even though ridership levels on Amtrak were otherwise sufficient to maintain continued service.

What Can Be Done to Offset the Negative Effects of Consolidations?

Specific strategies to offset the negative effects of railroad consolidations are available.

Small Railroads

One way that rural areas have been able to prevent some of the negative effects arising from consolidations has been to establish "small railroads." The Staggers Rail Act created specific mechanisms by which portions of a major railroad (that is, Class I lines, with 1995 annual revenues of at least $255.9 million) that were to be abandoned could be sold to local interests as small ("short-line") railroads, with 1995 annual revenues less than $255.9 million. These provisions allowed major railroads to more easily streamline their operations and offered local entrepreneurs a chance to profit from local operations. At the same time, they ensured that smaller communities would continue to be served by rail service in the face of what would otherwise have been an abandonment. Since deregulation, numerous small railroads have been expanded or established on routes that were either abandoned or faced abandonment. These have grown nationally from 18,255 miles in 1980 to 45,300 miles in 1995, accounting for more than a quarter of all track mileage in 1995 (fig. 2).

Small railroads offer the advantages of lower labor and operating costs, and they generally allow for greater flexibility in marketing and service. Also, because these lines are often owned locally, small railroads can foster a source of pride and greater community involvement in the railroad. Although startup costs for small railroads can be high and their financial viability often depends on local economic conditions, a number of rural areas facing abandonments have preserved rail service by establishing a small railroad. One community that benefited in this way was Phillipsburg, Kansas (1990 population of 2,800), located in the north central part of the State. In 1982, the town was faced with an abandonment when the Rock Island Railroad went bankrupt, but it was able to keep its rail service after the establishment of the Kyle Railroad. Operating on 780 miles of track formerly owned by the Rock Island line, the Kyle serves various farming communities in northern Kansas and eastern Colorado, and specializes in hauling shipments of grain.

Government Involvement

Since the 1970's, the Federal Government has been an important source of financial assistance for areas facing cutbacks in rail service (Due and others, 1990). Under the U.S. Department of Transportation's Local Rail Freight Assistance program, money has been provided to States for the maintenance of rail lines when consolidations have taken place, with program funds used to conduct rail planning activities, acquire railroads, and rehabilitate existing rail facilities. In fiscal year 1995, $10.4 million was made available under this program, although its future funding remains unclear. Federal funding has also been provided through programs run by the Department of Agriculture, the Economic Development Administration, and the Small Business Administration, although funding levels have been sharply cut back in recent years.

Short of disapproving a merger outright, the Federal Government can mitigate some negative effects of a rail merger by imposing specific requirements as preconditions for approval. For example, one way to preserve competition in rail service under a proposed merger is to require "open access," a strategy that allows competing railroads and shippers to use a consolidating railroad's tracks, thereby preserving local competition in some markets. Alternatively, competition can be preserved by requiring a merging railroad to sell a portion of its tracks to a competitor. Both strategies were mentioned as possibilities for an earlier proposed merger between CSX and Conrail.

State and local governments have also been active in reducing some of the negative effects of consolidations, mainly through the purchase of rail lines that were set to be abandoned. For example, establishment of the previously described Kyle Railroad was made possible through financial support from the State of Kansas, administered through the Mid-States Port Authority, an entity created in 1980 so that rail service could be preserved in northern Kansas, following the Rock Island bankruptcy. Similar efforts have been undertaken in other States, such as South Dakota, New Hampshire, and West Virginia.

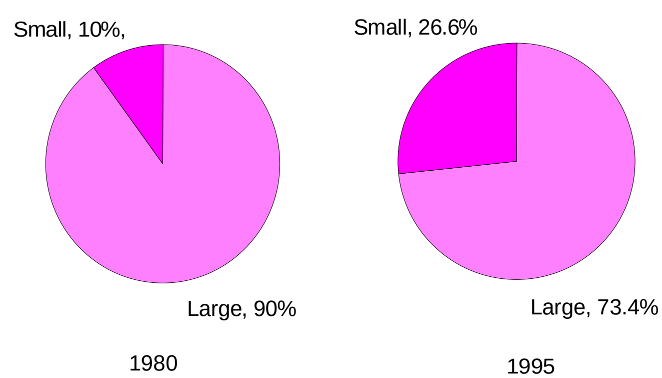
Rails-to-Trails

By some estimates, 2,000-3,000 miles of track are abandoned annually as freight lines attempt to make their operations more profitable. The Rails-to-Trails program, in existence since 1986, attempts to compensate for some of the negative effects associated with these abandonments by converting the unused track into recreational uses, such as hiking, biking, running, skateboarding, roller skating, snowmobiling, horseback riding, and cross-country skiing. One town that benefited from this program is Marion, Indiana (1990 population of 32,000), located about midway between Indianapolis and Fort Wayne, which lost a significant share of freight and passenger rail service in 1986 when the host carrier, Chesapeake & Ohio (renamed CSX), rerouted its line through Indianapolis. Local residents decided to make the most of this loss by converting large portions of the abandoned rail line into recreational use through the Rails-to-Trails program.

Figure 2

Percentage distribution of railroad miles operated by size, 1980 and 1995

Small railroads have grown in importance since deregulation



Source: Association of American Railroads, *Railroad Facts*, (various years).

To establish a "rail-trail," local or State authorities must initially acquire the "right-of-way" of the abandoned track from local landowners, with costs typically ranging between $10,000-$40,000 per mile. This is done under the process of "rail banking," in which a local or State agency keeps the abandoned routes for possible railroad use, but allows them in the interim to be used as recreational trails. Improvements must then be made on the track by upgrading or converting it for recreational use (for example, by laying wood chips or asphalt, or modifying bridges). Typically, funding for this comes from a variety of State and local sources or foundations, although the Federal Government sometimes also provides assistance.

Rail-trails have many benefits. Public use is generally controlled on the abandoned route through strict rules excluding unwanted motorized vehicles (other than snowmobiles). Also, proponents argue that rail-trails enhance property values, and are important in reviving local pride, especially in the face of abandoned rail service. Local landowners often oppose rail-trails because opening public right-of-ways might encourage unintended and undesirable use of the trails. But the program has been quite popular among users, with the national rail-trail system being used approximately 75 million times annually.

Conclusions

Faced with increasing competition from trucking, pipelines, waterways, and air transportation, the Nation's rail network has been steadily decreasing in size from a peak of 254,000 miles in 1916 to only about 170,000 miles by 1995, a 33-percent reduction. This trend continued after the Staggers Rail Act of 1980. Deregulation has brought cheaper, faster, safer, and more efficient rail service, but some rural areas have been hurt by reduced competition in rail service and an increasing number of abandonments. Some specific strategies to counter negative effects of rail consolidations are available, including the establishment of small railroads, greater Federal and State involvement, and the Rails-to-Trails program. These strategies are likely to become more important as the Nation's rail industry becomes increasingly concentrated among fewer major carriers.

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