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Mode Alternatives for Serving Rail Freight Users

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The recent northeast rail crisis focused public attention and action on continuing branch-line service threatened with abandonment. During the early 1970s, thousands of miles of rail were abandoned as railroads sought ways to cut operating and maintenance costs. Shippers were forced to ship by truck, relocate, or go out of business. All decisions were made in the private sector. The rail crisis and the Regional Rail Reorganization Act of 1973 brought public planning and public funding into the issue of branch-line abandonment. Public agencies and shippers could work together to preserve service through contractual agreements. A federally funded branch-line assistance program has provided $360 million to responsible public agencies for the purpose of funding branch-line subsidies and capital improvements. New York State has used this program in a comprehensive manner to preserve 43 industries and more than 3600 jobs through selective capital and operating investments. The factors that constitute a successful rail assistance program are described. Mode-choice alternatives that confront a rail freight user are discussed. A case study that involves a branch line in western New York is illustrated. The history of the branch line is described. The alternatives that face shippers and the state are explored along with the political environment that accompanied the decision-making process.

The purpose of this paper is to explore the phenomenon of recent changes in rail freight service in the Northeast and to examine how affected shippers and communities, by working through a state transportation department, have coped with the recent rail crisis in freight transportation. Much of the information and data result from my assignments with the New York State Department of Transportation's rail program, which was created to respond to New York's rail crisis.

Recent federal initiatives in rail deregulation, market dominance, and main-line rationalization have indeed made service discontinuance a nationwide issue. This paper should be of assistance to those public officials and private interests concerned with the trade-off of retaining rail service and maintaining a healthy transportation and economic environment.

BACKGROUND

Changes in transport technology, government regulations, labor patterns, and market conditions have contributed to the decline of rail service in the Northeast, which in turn has led to the abandonment of thousands of miles of railroad main lines and branch lines. From 1955 to 1974, the share of intercity freight carried by rail declined from 55 to 38 percent. In addition, there was a decrease of 20 000 main-line track miles during that period. The railroads chose plant rationalization as a principal means of reducing operating costs through the elimination of light-density traffic corridors. At the same time, the railroads selectively reduced service and deferred maintenance in order to reduce costs.

In 1970, the rail crisis in the Northeast peaked when the recently formed Penn Central colossus, a 20 000-mile railroad system that encompassed 16 states, went into bankruptcy. Soon other carriers in the Northeast followed into insolvency. In total, these railroads served 55 percent of the nation's industries over their 31 700-mile system. Worse, it was soon apparent that the bankrupt railroads could not successfully reorganize under the traditional methods of railroad restructuring as interpreted in Section 77 of the Federal Bankruptcy

Act. An economic disaster seemed imminent. This conclusion prompted Congress to intercede and begin a massive federal railroad planning effort. This resulted in the passage of the Regional Rail Reorganization Act of 1973.

The rail assistance program that emerged from the act, known as the Title IV program, has given state rail organizations, shippers, and local governments the opportunity to meet the branch-line service problem through the continuation of rail service or the selection of alternative modes.

In order to realize the benefits of a public rail assistance program, several elements are essential. The following elements were present or were created in the Northeast, particularly in New York State, and collectively made possible a rail freight assistance program.

Established Need and Methodology

The Northeast rail crisis created a critical need to preserve essential rail service. In New York State more than 600 miles of rail lines and 43 industries that employed 3651 workers were threatened with termination of service. A methodology was established for quickly classifying the impacted lines and shippers--a methodology that segregated the rail lines into three categories. The economic, social, and environmental factors were analyzed and from this analysis, the following three branch-line categories emerged:

1. The negotiated-solution lines are those branch lines that offer the best chance for eventual profitability. By a combination of altering operating practices, rehabilitating the line to reduce rail operating costs, public acquisition of the property, carload surcharging, and other innovative practices, the branch lines in question can be removed from further public subsidy without the loss of essential rail service.
2. Social-need lines are branch lines that require continuation because the cost of providing rail service is less than the public cost in terms of lost jobs, increased energy consumption, and environmental trade-offs.
3. Transition lines are branch lines that offer no hope for a permanent rail solution and on which the loss of rail service is less costly than the cost to maintain service. Lines in this category are included for a short term only.

Rail Plan and Program

Following a methodological analysis of branch-line needs, a plan and program of projects is developed. The plan, a state rail plan forged in cooperation with the shippers and communities, identifies the lines to be publicly subsidized and contains the strategy for necessary branch-line capital improvements. Schedules and costs are also included in the plan.

Public Funding Commitment

The Regional Rail Reorganization Act of 1973 and subsequent acts provided $360 million to the 17 states in the Northeast region for the purpose of providing subsidy payments to designated rail operators and to fund rail capital improvements.

The Rail Revitalization and Regulatory Reform Act of 1976 extended the program funding nationwide.

Community and Industry Acceptance

A successful rail assistance program must have the support of the shippers and the communities they serve. Such acceptance is gained through continuous and meaningful dialogue and surveys and is ultimately bound by contractual agreements.

Existing Railroad Infrastructure

There should be capable class I railroads or progressive short-line railroads that can be the contractor for rail service on the subsidized lines. Through publicly assisted improvements, these same operators may become the permanent owners or operators.

Agency Capable of Implementing the Program

Congress established the minimum requirements for the public agency to administer the subsidy program, as specified in Section 402(c) of the Regional Rail Reorganization Act of 1973. In summary, the state agency must

1. Establish a rail plan,
2. Possess the authority and administrative jurisdiction to manage the plan,
3. Possess fiscal controls, and
4. Comply with the regulations of the Secretary.

In practical terms this meant that a state had to have the human resources to plan, design, negotiate, monitor, and inspect rail projects. For New York this required the negotiation of agreements with railroads as designated operators of the subsidy lines as well as lease agreements with the owners of the rail properties--the trustees of the bankrupt railroads. It further meant contracting for capital improvements either with the railroad or with railroad contractors. In all, 22 capital construction contracts were executed at a cost of $9.2 million.

MODE-CHOICE ALTERNATIVES--A CASE STUDY

When a rail freight user is faced with possible loss of rail service, the following alternatives exist:

1. Continue service on the economically marginal branch line,
2. Retain partial rail service by routing to the nearest permanent rail line and trucking the rest of the haul,
3. Switch entirely to truck service and abandon rail service, or
4. Pay an extra cost above the quoted freight rate so that the individual shipper (or the shippers collectively on the line) can provide the funds to ensure permanent rail service.

A branch line that illustrates rail-shipper alternatives is the Hojack-Ontario Secondary, located in western New York. This 150-mile railroad was completed in the late 19th century to serve the rich fruit-growing and food-processing region of western New York along the shores of Lake Ontario. Near Niagara Falls, relatively steep grades of up to 1.5 percent and unstable soil conditions were found, and these conditions in turn caused increased operating and maintenance costs. A roadbed cross section would typically show a cinder-ballasted track base that supported 80-lb rail rolled before World War I and wood cross ties 30-40 years old.

Service gradually shifted westward as the fruit-growing and food-processing industry switched to truck service and as the chemical industry became established in the Buffalo-Niagara Falls area. Soon industries were concentrated in a 30-mile area east of Suspension Bridge-Niagara Falls. Service was

provided by trains and crews assembled in the Buffalo-Niagara Falls area. This arrangement was terminated in 1961 when a small section of track was removed during highway construction and never replaced. Service was provided from the east via a 76-mile run from Rochester, a costly operation that prompted roadbed disinvestment by the New York Central Railroad and caused service to erode.

This deteriorating condition and the rail crisis prompted the Penn Central to apply for abandonment in 1972. Protests by major shippers, the impacted communities, and public officials caused the Interstate Commerce Commission to defer the abandonment. It was studied by the United States Railway Association for profitability for possible inclusion into the Consolidated Rail Corporation (Conrail).

The Hojack line, with operations constrained by the 76-mile operation, was projected to require an annual subsidy of up to $462 000. The United States Railway Association rejected the Hojack line for conveyance to Conrail. After April 1, 1976, the line could only be continued through the federal-state subsidy program. The alternative was abandonment of service.

The rail line was unprofitable because of the high maintenance and crew costs associated with the operation of a 76-mile branch line. The track was in a waivered condition [the ties and gage did not meet minimum Federal Railroad Administration (FRA) specifications for class I track]. It frequently took one week for a crew to make a complete delivery and return. Derailments were common, and taxi, fuel, and equipment costs all contributed to the losing operation.

New York State had a better idea. Rather than continue to subsidize a hopelessly unprofitable operation, a plan was devised to rehabilitate the railroad from Niagara Falls to serve the profitable 30-mile segment. The remaining 45 miles of track could be abandoned. The key to the plan was the restoration and rehabilitation of the track through the Niagara escarpment area. This effort would require engineering surveys, soil investigations, and plan preparation. The proposal was widely accepted in concept.

While the rehabilitation proposal was being developed, rail service had to continue. This was accomplished by contracting with a connecting railroad, Conrail, to continue service by using public funds to provide subsidy payments. The agreement with the railroad stipulated the frequency of service, crew size, special maintenance, and liability responsibilities. At the same time, the railroad right-of-way was secured by a lease with the Penn Central trustees. The service through the first year of the subsidy program cost nearly $450 000 (the difference between costs and revenues), or $973/carload for the 456 revenue cars.

Before starting final construction plans, New York State officials held a local public information meeting. Local opposition to the proposal was unexpectedly strong. Residents had become accustomed to not seeing a railroad in their neighborhood and had used part of the right-of-way for a walking path. In addition, shipper support for direct rail service had diminished.

This was the dilemma: Should the state pursue the development of a controversial rail rehabilitation project and risk years of court fights and litigation while maintaining costly rail service or should alternatives to rail service be explored? The stakes were high. The five principal shippers on the line represented 190 jobs and an annual payroll of $1.5 million. There were also consumer savings, property tax savings, and industry investment by retaining rail service if loss of rail service meant loss of business.

The first action was to reassess the shippers' actions if they lost rail service. Earlier surveys showed industries shutting down or relocating on viable rail lines. Upon resurvey, these same shippers showed that they could stay in business if accommodations to suit their particular shipping alternatives were made during an orderly transition period. The alternatives included the following:

1. Construction of a transloading-warehouse facility at the nearest rail head for consolidation and distribution,
2. Construction of a facility to accommodate critical shipments of liquid chemicals and soybean oil,
3. Investment in a 20-unit truck fleet, and
4. Team tracking.

Each alternative was pursued during the critical period when rail service was being phased out. During this same period there was intense political activity. Local government, sensitive to the loss of rail service, maneuvered with the press, shippers, and elected officials. For a two-month period, daily press coverage was common as the status of negotiations was closely followed. At the conclusion of rail service, mandated by FRA because of safety violations, the alternatives were in place.

The result was that the only public investment required was a $200 000 boiler to assure year-round deliveries. The shippers accommodated the loss of rail service without any adverse economic or social impacts. The county, planning for future possible reinstitution of rail service, sought to acquire the right-of-way and is still negotiating with the trustees.

Finally, this project provided an opportunity to test prior survey results regarding the selection of alternatives to rail service. Four principal shippers, who accounted for 85 percent of the traffic, had been surveyed prior to the termination of rail service. Three shippers said they would relocate their plant on a profitable rail line. The fourth would switch to trailer-on-flat-car service. What actually happened was that two shippers switched completely to truck service and two team-tracked from the nearest rail point.

CONCLUSION

The New York experience indicates that rail service is a vital component of a healthy economy and a viable goods-movement system. However, when the continuation of an unprofitable rail service provides no permanent transportation solution, alternatives can be found. The importance of securing these solutions through thorough analysis, shipper and community involvement, and good-faith bargaining cannot be overemphasized.

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