

## RAILROAD RENAISSANCE: THE POST-1970 SHORT LINE MOVEMENT

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### ABSTRACT

Since 1970 and especially since railroad deregulation in 1980, there has been a proliferation of hundreds of new short line rail companies. These railroads range in length from about a mile to more than a thousand miles (those over 350 miles are called "regionals"). They were mainly formed when major Class 1 rail systems spun off marginal trackage. This paper discusses the reasons for the short line renaissance.

The 1970 collapse of the Penn Central reflected a long-growing crisis in American railroading. Plagued with redundant trackage, myriad government regulations (including that which obligated unprofitable passenger service), and inflexible union work rules, railroading was a reflection of Porter's industry in decline. When the Penn Central failure resulted in the country's largest bankruptcy, railroading could no longer function under the status quo. The Penn Central's bankruptcy trustees said the system should be cut by about half: some 10,000 miles needed to be abandoned. Yet among the lines proposed for abandonment were some which served vital interests: they had shippers who needed rail service. Abandonment would destroy the shippers' businesses with the resulting job losses which could be harmful to communities dependent upon them. As a result, short line companies stepped in to operate trackage Penn Central could not.

Other events increased the number of short lines. In 1980, Congress passed the Staggers Act which effectively deregulated railroading. As a result, Class 1s could easily dispose of unwanted trackage. This was done either through abandonment or, in many cases, by spinning off marginal lines to short line or regional railroad companies. Also, the demise of two large systems, the Rock Island Line and The Milwaukee Road resulted in short line and regional companies taking over large portions of their trackage. Finally, the continued rounds of mergers of Class 1s into a few megarail systems has resulted in redundant lines upon which short line and regional operators can provide local service.

Short lines have provided personal customer response and have been able to operate outside of restricting union work rules, even in cases where their employees are unionized. These innovations are in addition to the traditional railroad advantage of competitive rates. As a result, in the past three decades, American short line railroad companies have become models of effective railroad operations. Also, some have been

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able to export their expertise by becoming operators of denationalized rail systems in other countries.

### **Introduction**

From the proverbial "Slow Train Through Arkansas" to a familiar spot on Parker Brothers' Monopoly board, there has long been an awareness of short line railroads in the United States. However, such companies are not limited to backwater songs and legends. Rather, the last 30 years of the 20<sup>th</sup> century witnessed extensive growth in the numbers of short lines or, in the cases of light-density railroads of more than 350 miles, rail companies called "regionals." These stand in contrast to the large "Class 1" railroads that make up most of the nation's trackage.

Beginning with the Penn Central collapse in 1970 and fueled by railroad deregulation and liquidations of major rail systems in the 1980s, the short line renaissance has been described as an important aspect of recent events in railroad history<sup>1</sup>. Penn Central triggered awareness of a crisis in American railroading. As the country's biggest bankruptcy, Penn Central seemed to indicate that the state of the 1970 railroad system was symptomatic of Porter's<sup>2</sup> portrayal of an industry in decline. In assessing the situation, the Penn Central's bankruptcy trustees said the system should be cut by about half: some 10,000 miles needed to be abandoned. Yet among the lines proposed for abandonment were some which served vital interests: they had shippers who needed rail service. Abandonment would destroy the shippers' businesses with the resulting job losses which could be harmful to communities dependent upon them<sup>3</sup>. As a result, short line companies stepped in to operate trackage Penn Central could not.

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In lieu of the narrow focus on economies of scale usually represented by Class 1s, short lines have provided personal customer response and added-value logistics services. They also have been able to operate outside of restricting union work rules, even in cases where their employees are unionized<sup>5</sup>. These innovations are in addition to the traditional railroad advantage of competitive rates. As a result, in the past three decades, American short line railroad companies have become models of effective railroad operations. Also, some have been able to export their expertise by becoming operators of denationalized rail systems in other countries<sup>6</sup>.

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## Porter's Industry in Decline

Based upon Spraggins<sup>7</sup>, and illustrated in Table 1, railroading by 1970 had developed characteristics that Porter would have described as those of an industry in decline. Declining industries are those "that have experienced an absolute decline in unit sales

TABLE 1 DECLINING INDUSTRIES AND CLASS 1 RAILROADS

Porter's Industry in Decline	Class 1 Railroads
Absolute decline in unit sales over a sustained period	Drop from 74.9% to 37.2% in market share, 1929-1985
Demographic and manufacturing shifts	Decline in urban areas served
Worldwide economic changes	Loss of manufacturing to offshore locations
Product substitution	Better service from trucks
Technological change	Highway development
Shifts in need	Manufacturing moves to suburbs not served by rail
Exit barriers: --Specialized assets --Fixed costs of exit --Information barriers --Managerial barriers --Legal, social barriers	--Specialized assets --Labor contracts --Pre-1980 government regulation

Source: *Competitive Strategy: Techniques for Analyzing Industries and Competitors* by Michael E. Porter. Copyright (c) 1980, 1998 by The Free Press, a Division of Simon & Schuster, Inc. By permission of the publisher; Spraggins, Barry H., "Marketing Rail Service in a Deregulated Environment," *Transportation Quarterly* 43, no. 2 (April, 1989): 277-281.

over a sustained period<sup>8</sup>." Between 1929 and 1985, railroad market share of revenue freight ton-miles dropped from 74.9 percent to 37.2 percent. During that time, the market share of motor trucks and inland waterways increased eightfold, and pipelines increased fivefold. Only shipping in the Great Lakes, dependent upon the Midwestern "rust belt," declined more than railroads, retaining only one-sixth its 1929 market share. Among reasons for railroad decline were changing demographic and manufacturing patterns<sup>9</sup>.

In addition to citing the demographics reason, Porter<sup>10</sup> issued parallel causes of industries in general that are in decline, including slower worldwide economic expansion, plus high inflation and technological change. World economics have affected American railroads, since much basic manufacturing has moved offshore. Not only did this cause finished-product rail traffic declines, but there was a drop in the tonnage of raw materials railroads carried to manufacturing plants hurt by foreign imports<sup>11</sup>.

At least two of the reasons cited by Porter<sup>12</sup> were more directly evident in railroad decline: product substitution and technological change. Many shippers replaced rail-

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roads with trucks, a transportation mode which has taken advantage of technological advances in road construction, especially development of the interstate highway system.

Another of the characteristics of declining industries is in the category Porter called "shifts in needs<sup>13</sup>." Spraggins identified this as the movement of manufacturing companies to suburbs away from central cities with their dense rail lines. Easy to reach by trucks from nearby freeways and interstate highways, newer suburban manufacturing plants were indifferent to rail and often had no ready access to siding connections<sup>14</sup>.

Exit barriers are a key component to declining industries, including durable and specialized assets, fixed costs of exit, information barriers, managerial or emotional barriers, government and social barriers, and the mechanism for asset disposition<sup>15</sup>. Railroads can face substantial exit barriers. They are saddled with durable and specialized assets. Locomotives and freight cars can normally be sold, of course, only to other users of locomotives and freight cars. When the whole industry is in decline, the resale market obviously will be limited. Also, a key dimension of a railroad's fixed plant is its right-of-way. The rails can be sold for scrap, but as a real estate asset there often has been little value in a strip of land perhaps a hundred feet wide running for miles through the countryside. Tons of ballast stand in the way of making former railroad property of interest to adjacent farmers, although some have removed such debris in order to increase their land under cultivation. Another salvage solution often has been the conversion of rights-of-way to public hiking or bridle trails, a practice public policy makers have encouraged<sup>16</sup>. Also, in recent years railroads have realized lucrative revenue by leasing underground rights-of-way to fiber-optic cable companies<sup>17</sup>. Nevertheless, much of the sizeable real estate owned by railroads, such as that for terminals and switching yards, often has been within the declining heavy industrial sections of decaying cities. Fixed costs of exit also have included massive labor settlements in which Class 1s have been subject to agreements requiring six years of full pay for union workers displaced by line abandonments<sup>18</sup>.

Finally, the barriers to exit for railroads have included those imposed by government and society. Prior to the Staggers Act, an attempt by a railroad to abandon an unprofitable line usually resulted in a long battle which included protests from shippers, labor, and affected communities. Railroading was in such a state of decline that by 1971 industry return-on-investment was a mere 2.12 percent<sup>19</sup>.

### **The Penn Central Collapse**

When the 1970 Penn Central failure resulted in the country's largest bankruptcy, railroading could no longer function under the status quo. Penn Central suffered from redundant trackage, heavy government regulation (which included requirements of money-losing passenger service), burdensome union work rules, and increased competition from other modes, especially trucks. To remedy the situation, Penn Central's bankruptcy trustees called for major dismembering of the system. However, among

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some 10,000 miles of railroad to be cut were some critical to rail-dependent shippers and jobs in the shippers' communities. "None of these people had been given notice that their rail service was in jeopardy until the railroad suddenly messed up its affairs"<sup>20</sup> Yet, the Penn Central could not afford to operate those branch lines.

### The Conrail Solution, Deregulation, And Short Lines

Answers to the poor post-World War II state of railroads in the Northeast were the formations of two government corporations: Amtrak, which relieved American railroads of intercity passenger trains in 1971, and Conrail, which took over the bankrupt Penn Central and other ailing Northeastern carriers beginning April 1, 1976. Uncle Sam had become a railroader, and upon doing so he apparently realized he needed to do something he previously had prohibited: keep only his most profitable routes and get rid of marginal trackage. That, coupled with the political winds of deregulation, resulted in Congress passing the 4R Act of 1976 and the Staggers Act of 1980. These laws effectively deregulated railroads and meant that Class 1s now had more freedom in their efforts to spin off marginal trackage<sup>21</sup>.

In the 1970s and '80s the contemporary short line movement emerged as new operators stepped in to run trains on trackage left over by Conrail or liquidated big carriers such as the Rock Island and the Milwaukee Road<sup>22</sup>. For instance, Hillsdale County, Michigan, and the state of Michigan elected to run large sections of former Penn Central trackage<sup>23</sup>. Other new railroad companies joined in, and, according to Due<sup>24</sup>, by 1984 short line railroad operators included other states and local governments, shippers, new companies, and some of the original Class 1 owners. Not saddled with strict union rules or heavy bureaucracy, many of these new companies became remarkably successful. In all, 350 new railroads were formed from 1970 to 1996, totaling 35,919 miles of trackage<sup>25</sup>. Only 44 short lines consisting of 1,893 miles had been abandoned from 1970 to 1992<sup>26</sup>. Most short lines began as spinoffs from larger railroads stemming from three reasons: as alternatives to abandonment, as divestitures, or as the result of a desire to develop a low-cost feeder railroad<sup>27</sup>.

### Reasons for Short Line Spinoffs

A short line spinoff as opposed to outright abandonment holds several advantages for the selling railroads. First, the Class 1 railroad is spared salvage costs inherent in the closing of a rail line. Secondly, the large railroad hopes to reap benefits of any interline freight revenue stemming from potential development of new business on the spun-off line. The Federal Railroad Administration (FRA) has viewed short line spinoffs as an alternative to permanent losses of rail service. Since 1980 there has been an inverse relationship between rail abandonments and new short line launchings. Sale prices of generally unprofitable, usually dilapidated rail lines have tended to be about equal to liquidation value or about \$20,000 per mile<sup>28</sup>.

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Some Class 1s have sold off lines that have been profitable and fairly well-maintained, including two notable examples occurring about 1980. In that year, the Rock Island lost a five-year battle with bankruptcy, was liquidated, and short line companies assumed major portions of its operations. Also in 1980, the Milwaukee Road truncated itself west of Miles City, Montana. By 1982 it no longer went west of Ortonville, Minnesota, and by the next year the Milwaukee Road's 3,090 miles represented less than a third of its 1970 size<sup>29</sup>. Despite corporate bankruptcies on the part of Rock Island and Milwaukee Road, some portions of them were viable and between 1970 and 1986 they had sold more than 2,850 miles to short line operators<sup>30</sup>. The Illinois Central Gulf (ICG) sold fairly high-traffic lines from 1970 to 1986. The ICG was not bankrupt; rather, its line sales stemmed from a parent company decision to gradually divest itself from the railroad industry<sup>31</sup>.

Unlike the salvage value costs associated with run-down money-losing rail lines, profitable trackage tends to represent pricing more in tune with the current and potential earnings of the property. Many sales have exceeded \$100,000 per mile and usually consist of trackage in good physical shape and with annual traffic in excess of 100 cars per mile<sup>32</sup>.

Some Class 1s developed short lines as feeders for themselves. They pursued short line spinoffs in order to 1) rid themselves of operating and maintenance costs, 2) realize economic value through the sale of property, and 3) retain traffic flow to and from the line without the burden of ownership. Such sales do not always result in the selling railroad gaining maximum possible price levels in the transaction. Instead, the seller may be looking for long-term economic benefit by providing a sales price that will allow the buyer a reasonable chance for mutually beneficial success<sup>33</sup>. As sources of traffic for Class 1s, short lines have become increasingly important. They been described as the Class 1s' second and third largest customers<sup>34</sup> (Oglesby 1997). The largest railroad in the United States, the Union Pacific (UP), collectively listed short lines as its biggest customer, providing nearly 1.6 billion dollars or 15 percent of UP revenues<sup>35</sup>. Another major Class 1, Burlington Northern Santa Fe (BNSF) no longer merely saw short line spinoffs as solutions to labor costs; rather, BNSF viewed short lines as extensions of the BNSF itself<sup>36</sup>.

### **Advantages of Short Lines**

Short lines offer several advantages which make them viable operators of marginal lines unwanted by Class 1s. The primary advantage is the ability to operate at low cost. Several reasons contribute to this, including short lines' frequent ability to make use of non-unionized labor. Short lines can pay such labor a local prevailing wage as opposed to that of a national contract. With or without unions, short lines are freed from costly work rules which often restrict the number of different jobs a worker may perform. Railroad operations require a variety of skills including engine driving, being responsible for train movements, properly coupling and uncoupling cars, dispatching, main-

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taining rolling stock, repairing track and structures, negotiating with shippers and other railroads, and general office work. As a result, it is imperative that low- and medium-traffic density rail lines be able to realize maximum labor productivity in the form of liberal work rules and procedures and in the ability of employees to work multiple jobs<sup>37</sup>.

Short line spinoffs have been credited with removal of cabooses from through trains. In effect, unions had a choice: let management abolish cabooses and reduce crews or watch management spin off more trackage and jobs to short line and regional railroads. The unions agreed to cooosue removal<sup>38</sup>.

Another advantage short lines have is their ability to offer flexible service. Given high Class 1 wages and costs, major railroads are often unable to offer customized service, such as picking up a shipper's single freight car on demand. Evidence of short line service customization was provided in testimony before the U. S. Senate Subcommittee on Surface Transportation. Ed Immel, rail planner of the Oregon Department of Transportation, testified of the flexibility and management aggressiveness of the state-owned Lake County Railroad operating a former branch of the Class 1 Southern Pacific:

The line is headquartered in Lakeview, which means its service is improved. Before it took 3 days to move a car in Lakeview because the Southern Pacific, where they were headquartered, had to travel 90 miles one day, down from Klamath Falls, tie up overnight, then had a day to go up and back again, tied up overnight in Alturas, and then another day to return to Klamath Falls. So three days if you wanted to move a car 100 feet. Now it is a telephone call and 15 minutes later the *general manager* or one of the employees are down there to move the car<sup>39</sup>.

Some characteristics of short lines, including pride in local ownership, flexible working conditions, shipper equity and creative customer service have been present on small railroads since long before the contemporary short line renaissance<sup>40</sup>.

Short lines have seemingly adopted the argument that the seller must be aware of the buyer's entire value chain, and must understand economic and political ramifications throughout the channel. In other words, the seller must not only understand its buyers, but must also be able to discern the market environment of the buyers<sup>41</sup>. Among innovative short line techniques have been the efforts by one regional to regularly monitor cement plant sand stockpiles and to proactively bring sand shipments before the customer runs low and calls the railroad in a panic<sup>42</sup>. The CEO of one Midwestern regional said his job was to do whatever it took to get shipper business, not make excuses on why something could not be done. In addition to adding value through problem-solving, the executive's railroad also offered competitive rates<sup>43</sup>.

### Export of U. S. Short Line Management Techniques

Unlike most countries, the United States has an intercity railroad system that has for the most part been privately owned. There have been a few exceptions, most notably the Alaska Railroad, Conrail, and Amtrak. The frontier aspect of the Alaska Railroad resulted in its ownership by the federal government, later by the state of Alaska<sup>44</sup>. Conrail and Amtrak represent government bailouts. Conrail — eventually privatized and partitioned — was a relatively temporary means to rescue the bankrupt Penn Central and other railroads in the Northeast, Amtrak took over deficit-ridden passenger service.

Governments of most countries, including those of Canada and Mexico, have operated their own rail networks. However, some nations began to consider selling their railroads and other nationalized industries such as utilities, steel mills, and petroleum companies. In addition to generating needed cash, such sales would give governments opportunities to dispense with deficit-ridden rail operations<sup>45</sup>.

In spinning off rail systems, countries around the world have turned to U. S. firms to operate them. Significantly, major players in bids to secure international operating contracts are U. S. companies in the short line or regional category<sup>46</sup>. The management capabilities of short line operators apparently are recognized worldwide and nations seeking to rid themselves of nationalized rail properties have not always looked to U. S. Class 1s to provide management expertise. Rather, the international attention focused upon American short lines indicates that the short lines have provided, in effect, a pilot program for railroad management that is internationally recognized as progressive.

### Short Line Weaknesses

Short lines can be vulnerable to catastrophes such as floods and bridge washouts<sup>47</sup>. Where the Class 1 has the resources to fix the flood or washout damage and may be able to reroute traffic elsewhere on its system during repairs, the short line may not have any choice but to immediately go out of business. Finally, short lines indirectly compete with Class 1s, since some freight, rather than move by short line, will go by truck to the Class 1, resulting in no rate division<sup>48</sup>. In addition, Class 1s may pressure industries to locate plant sites along Class 1 rights-of-way instead of upon those of short lines<sup>49</sup>. Also, Class 1s may have expensive intermodal facilities which encourage drays from the customer's location to the intermodal terminal<sup>50</sup>.

Several recent developments have made the startup of short lines less attractive, at least for independent investors. For one, railroads since 1992 are subject to locomotive engineer certification provisions. As a result, short line purchasers must either have certified personnel ready to take over engineer duties or must hire expensive temporary workers until their own people are qualified. Secondly, the growth of short line conglomerates or holding companies means the independent investor faces bidding com-



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petition from companies with more resources and/or who are known quantities to Class 1 sellers<sup>51</sup>.

### Summary

In summary, short line railroads have experienced a renaissance, given the required rationalization of Class 1s and the circa-1980 deregulation of railroads. The growth and success of latter-day short lines was a rather unexpected by-product of deregulation and follows approximately 50 years of general railroad decline. Such decline resulted from a changing environment, heavy regulation and excessive labor restrictions. As a result of deregulator legislation in 1976 and 1980, Class 1 railroads were free to abandon or divest themselves of marginal freight trackage. Such divestitures resulted in Class 1 railroads still having access to traffic from the marginal routes as a result of their functioning as feeder lines.

Advantages of short lines over their previous Class 1 ownership include labor savings and flexibility. However, the small sizes of short lines means they cannot obtain the economies of scale of long hauls and they realize little or no advantages in many rail-oriented technological advancements. In addition, their small cash flows mean they are disadvantaged by an inability to self-insure and are at risk in the event of catastrophes such as floods and bridge washouts. Emerging problems for short lines include increased expenses stemming from new safety-driven government regulation, holding companies driving up railroad purchase prices, and threats of competition from Class 1s.

Nevertheless, short line railroads have resulted in many small communities and industries being able to retain train service. In the course of rescuing failing rail lines, short line operators also have been successful in applying entrepreneurial principles to an old industry.

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