U.S. Department
of Transportation

**Federal Railroad
Administration**

SMALL RAILROAD INVESTMENT GOALS AND FINANCIAL OPTIONS

A REPORT TO CONGRESS

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Executive Summary

Section 9 of the Amtrak Reauthorization and Improvement Act of 1990 (Pub. L. No. 101-322, July 6, 1990) directed the Federal Railroad Administration (FRA) to study the Class II and Class III railroads (collectively referred to as "shortline railroads") and determine their needs for financing in general, and for Federal loan guarantees such as the Section 511 program.

Section 511 of the Railroad Revitalization and Regulatory Reform Act of 1976, 45 U.S.C. §832, (4R Act) authorized a loan guarantee program for railroads. A fundamental criterion in determining whether or not a carrier can qualify for financing under this program is the carrier's ability to repay the loan on schedule. A number of loans were guaranteed under this program in the past, but Congress has not provided any Section 511 loan guarantee obligation authority since the mid-1980s.

Small railroads appear to face some unique problems and difficulties securing financing. According to the banking industry, it takes an inordinate amount of work to prepare a small railroad loan package, compared to a similar sized loan for other businesses (like a warehouse or an office building). Unlike many similar-sized businesses that need short-term loans for inventory or working capital, small railroads need long-term financing for long-lived assets such as track materials and equipment. Even when private financing could be obtained, these railroads felt that the terms offered were unsatisfactory. In

particular, loans were usually offered for not more than 8 years, too short a term for railroad investments that have a much longer productive life. The few banks that specialize in railroad financing generally restrict their loans to fairly large amounts—$5 million or more. However, local banks, which might be expected to offer smaller loans, have little or no railroad lending experience, and many of these railroads need small loans. There are also certain legal restrictions that may make it more difficult to recover the proceeds of a railroad loan after a bankruptcy or a default than a debt owed by a non-railroad borrower; these restrictions also tend to heighten a potential banker's reluctance to deal with the industry.

Most small railroads are privately held, and there are very little financial data available pertaining to this segment of the rail industry. Accordingly, to meet the objectives of the study, FRA surveyed Class II and Class III railroads and received 339 responses—about 70 percent of all independent shortline railroads. In addition, FRA interviewed bankers, state officials, and others for their perspective on the financial environment in which these carriers operate.

The survey was divided into two major sections: (1) Carriers that were not interested in Section 511 loan guarantees or did not foresee a need for loan guarantees could simply complete and return an abbreviated survey, responding only to questions regarding general information on their operating characteristics; and (2) carriers that were interested in Section 511 loan guarantees proceeded with the survey, providing financial data and information on their ability to meet their investment goals. Of the 339 carriers that responded to the survey,

118 (24 percent) indicated an interest in loan guarantees. These railroads indicated that they would need to spend $1.77 billion through 1995 to maintain and upgrade their systems to the appropriate level for existing and anticipated traffic. They expected to finance or fund internally $1.33 billion of these spending requirements, but estimated that they would be unable to raise another $440 million, mostly for track rehabilitation. Additionally, these carriers stated that they would like to refinance nearly $290 million of their existing debt. However, they believe that they would experience relatively few problems financing locomotives and rolling stock.

To determine the impacts that a Federal loan guarantee program could have on a carrier's spending goals, FRA used financial information contained in the survey data to make an assessment of a carrier's financial health and its ability to repay a loan under the more generous financing terms that might be provided with a loan guarantee. A carrier's potential borrowing power was estimated by determining the additional cash flow that would be available if existing debt were refinanced over a longer term and at a lower interest rate. It must be noted that much more information would be required to determine whether a specific railroad or project would actually qualify for the program if, in fact, guarantee authority were available.

Using the favorable terms that would probably be available with a loan guarantee, we estimated that the Class II railroads would be able to refinance $109 million of existing debt and invest $145 million for capital expenditures. The Class III's would be able to refinance

$156 million of existing debt and invest $122 million for capital expenditures. This would leave a total spending shortfall of only $22 million for the Class II's and $174 million (including refinancing requests of $24 million) for Class III's. Overall, we estimated that the carriers completing the survey would be capable of repaying a maximum of $532 million in loans with the longer terms and more favorable interest rates that a loan guarantee program would likely provide.

Of the 118 railroads interested in loan guarantees, 29 appeared to be capable of funding all of their proposed projects, either through internally generated funds or outside financing. There were 71 railroads that would need a loan guarantee to meet some or all of their spending goals. These carriers account for only 4 percent of all U.S. rail traffic. Finally, 18 railroads, all Class III's, could not qualify for loan guarantees under the most generous of terms assumed in the study—they handle 0.4 percent of the nation's rail traffic.

The independent Class II and Class III railroads appear to be generally healthy today, but a loan guarantee program could help some basically sound carriers fund projects they currently cannot undertake. However, there are a number of alternatives to a Federal loan guarantee program. States and local communities, shippers, and Class I connecting carriers, all of whom share in the benefits provided by a successful shortline, can and have taken a more active role. These groups have all provided assistance in the past, but they could play a more significant role in the future. Because the benefits accrue to the state and local communities, if financial assistance is appropriate, then it should be provided at that level.

I INTRODUCTION

The Congress in Section 9 of the Amtrak Reauthorization and Improvement Act of 1990 (Pub. L. No. 101-322, July 6, 1990), directed the Secretary of Transportation, in consultation with the Administrator of the Federal Railroad Administration (FRA), to undertake a study to determine the need and demand by Class II and Class III[1] railroads for Federal loan guarantees of obligations covered under Section 511 of the Railroad Revitalization and Regulatory Reform Act of 1976 (45 U.S.C. §831). Congress further directed that "[s]uch study and survey shall examine the present and potential need and demand for such guarantees to fund rehabilitation and improvement [to] facilities or equipment, acquisition of new railroad facilities, and refinancing of existing debt....Such report shall include an analysis of the present and potential need and demand for Federal guarantees of [C]lass II and [C]lass III railroad debt, the amount of guarantee authority required to meet that need, and a projection of demand for such Federal guarantees through fiscal year 1995."

The Section 511 Program

Federal loan guarantees provided for under the Section 511 program can assist a railroad in obtaining financing for needed capital expenditures for rehabilitation or equipment

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[1] The Interstate Commerce Commission (ICC), the agency responsible for the economic regulation of interstate railroads, classifies railroads by gross annual operating revenues adjusted for inflation. For 1990, Class II carriers have annual operating revenues greater than or equal to $18.9 million but less than $94.4 million, while Class III carriers have operating revenues less than $18.9 million, except that all switching and terminal carriers, regardless of revenue, are classified as Class III carriers.

purchases the carrier may otherwise delay or forgo. Under Section 511, loans made to railroads can be guaranteed by the Federal Government, if the borrower meets certain tests, including creditworthiness. The Federal guarantee removes the risk of nonpayment to the private lender and allows a lender to extend better terms, such as a longer term loan and a lower interest rate, than would otherwise be available to a railroad without the guarantee. Since the Section 511 program began in 1976, FRA has guaranteed fourteen Section 511 loans to six railroads (five Class I's and one Class III), for a total of approximately $248 million. Through February 1992, $218 million of this debt has been repaid, repurchased, or otherwise settled; defaulted payments not recovered to date total approximately $10 million; and the remaining $20 million is not yet due. Thus, the loss rate on the program to date is about 5 percent. Since the mid-1980s, Congress has not included any Section 511 loan guarantee authority in Department of Transportation (DOT) appropriations acts.[2] In the appropriations act covering fiscal year 1992, Congress further directed that no new guarantee commitments be made under Section 511.

The fundamental financial criteria applied by FRA in determining whether or not a carrier can qualify for a loan guarantee under Section 511 are its ability to repay on schedule and the adequacy of its collateral. The carrier must also provide reasonable assurances that it will use the loan economically and efficiently to improve service to customers, and that rail service will continue to be provided in the future. The language of Section 511 does not

[2] No DOT appropriation is required at the time a guarantee is made, but an appropriations act must provide current year guarantee authority. DOT, as guarantor of the loan, is responsible for nonpayments and has borrowing authority from the Treasury to satisfy nonpayments. Treasury borrowings must subsequently be liquidated by an appropriation.

exclude from the program financially healthy carriers that can secure funding in the private capital markets without guarantees. However, guarantee recipients must comply with restrictions on dividend payments to shareholders, which effectively discourages such railroads from participating. The program has been successful in meeting the financial needs of a number of railroads that otherwise would not have access to funds, but only one loan to a small carrier has been guaranteed. Prior to 1988, smaller carriers could apply for direct Federal loans under the Section 505 program.[3] This program provided significantly better terms than the Section 511 loan guarantee program for track rehabilitation projects.

Study Approach

The FRA surveyed Class II and Class III railroads (for purposes of this study both Classes are referred to as "shortlines") to obtain data on their spending goals for locomotives, rolling stock, improvements to facilities, and track rehabilitation.[4] They were also asked about their experiences in securing financing in the private credit markets. The estimates of current and future financing needs provided by these railroads, coupled with an assessment of their ability to meet these needs through internally generated funds and borrowing, provide a measure of the demand for a loan guarantee program.

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[3] Section 505 of the Railroad Revitalization and Regulatory Reform Act of 1976 (45 U.S.C. §825) provided direct Federal financing of qualifying railroad rehabilitation projects through Federal Government purchases of securities issued by railroads. The authority of FRA to buy those securities and to obligate Section 505 funds expired on September 30, 1988.

[4] Spending goals were provided by carriers and were not subject to independent review or evaluation.

The study addresses the following issues to estimate the amount of *guarantee authority* required to meet the goals of Class II and Class III railroads through 1995:

1. Sources, availability, and terms of financing that railroads have been able to secure.

2. An assessment of how well the credit markets function with regard to Class II's and Class III's.

3. The present, future, and potential capital needs of Class II and Class III railroads to maintain the rail plant and meet expected growth.

4. Importance of refinancing and the projected needs for refinancing.

5. Individual carrier's ability to obtain and repay financing at reasonable costs.

6. Alternative approaches to assuring adequate funding for economically viable shortline railroads.

II BACKGROUND—SMALL RAILROADS IN THE NATIONAL ECONOMY

Small railroads have been in existence for 160 years, but the number of these carriers has grown in the past decade. The regulatory reforms enacted in 1980 encouraged larger carriers to sell, rather than abandon, lines they could no longer operate profitably. According to the Association of American Railroads (AAR), more than 250 small carriers have been created since 1980.[5] In many cases, lines operated at a loss by larger railroads have been operated profitably by smaller carriers because of their lower operating costs and better service to customers. More important, these small railroads have continued, and often improved, service to shippers and communities that would otherwise be without rail service.

Determining changes in the operating and financial condition of Class II and Class III carriers is difficult. Financial information is not readily available, and there is no continuous flow of data to determine how this important segment of the railroad industry has fared over the past ten years. Class III railroads were exempted from filing financial information with the Interstate Commerce Commission (ICC) after calendar year 1979, and Class II railroads were exempted the following year.[6] The data acquired for this study represent only a "snapshot" of these carriers' current condition. They do not reveal trends.

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[5] Based on analysis of *Statistics of Regional and Local Railroads*, Association of American Railroads (Washington, 1988), and *Profiles of U.S. Railroads*, Association of American Railroads (Washington, 1987-1991).

[6] *Reduction of Accounting and Reporting Requirements*, codified at 49 CFR §1201(1-1)(c).

Legislative and Regulatory Changes

The Staggers Rail Act of 1980 (Pub. L. No. 96-448, October 14, 1980), which eliminated or reduced much of the regulatory burden on the rail industry, mandated a streamlined process for ICC decisions on rail mergers, line sales, and abandonments. One of its key provisions requires the sale of lines approved for abandonment to any financially responsible buyer who offers to purchase the line at net liquidation value, providing the buyer continues to provide rail service.

Prior to 1980, railroads wishing to dispose of unprofitable line segments, either by sale or abandonment, were often delayed for years by the regulatory process. In many cases, the ICC denied these actions outright. Maintenance was often deferred during this period, resulting in deteriorating service and reductions in traffic. Thus, even if sale had been a realistic option at the outset, the costs of rehabilitating the line after years of regulatory delay often exceeded the reduced revenues from the remaining traffic, making abandonment of the line the only perceived viable option. As a result, between 1950 and 1979, only about 25 new railroads were created per decade. However, regulatory changes in the early 1980s led to the formation of more than 250 new small carriers in that decade alone.[7]

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[7] *Statistics of Regional and Local Railroads*, Association of American Railroads (Washington, 1988). *Profiles of U.S. Railroads*, Association of American Railroads (Washington, 1978-1991).

Also beneficial to the formation of small railroads was the ICC's view of its authority over labor contracts when branch lines are sold. In 1985, the ICC ruled that existing labor agreements made between a carrier and its unions were not automatically transferred when the carrier sold a line; therefore, new owners would have more flexibility to negotiate work rules. Court decisions supported the ICC's approach in this area. A new market was created for rail lines with low traffic density—lines that might be unprofitable for Class I carriers, but attractive to those who could operate them at lower cost. While some rail lines with insufficient traffic to generate a reasonable profit were sold during this period as well, these new operations were generally short-lived.

Role of Class II and Class III Carriers

Today, Class II and Class III railroads account for approximately 8 percent of total railroad employment and nearly 25 percent of miles of road of the nation's 152,000-mile system.[8] They originate or terminate 16 percent of total rail traffic, and play an integral role in the nation's daily commerce.[9] They preserve transportation options for shippers and keep traffic on the rail system. These small, lower cost carriers often provide the critical transportation link to connect shippers with the nation's trunk carriers. For example, many

[8] *Profiles of U.S. Railroads*, Association of American Railroads (Washington, 1987-1990).

[9] *Ibid.*

country grain elevators rely on these lines to connect with Class I carriers for movements to millers, ports, and other markets.

In 1989, a joint ICC-FRA staff study, "A Survey of Shipper Satisfaction with Service and Rates of Shortline and Regional Railroads," found that shippers generally were pleased with the service and rates of the newly-formed Class II or Class III railroads serving them. In fact, shippers previously served by a Class I carrier indicated that service and rates had improved on the new railroads. Overall, shippers felt that since the carrier serving them was smaller, they were getting more personalized attention, and in some cases "service on demand." It has also been argued that "service on demand" has improved freight car utilization. There is also evidence that some small railroads have not just retained the traffic that existed when the line was sold, but in many cases are beginning to regain short haul movements that normally move by truck.[10] For example, one railroad (Wisconsin & Southern) reported that it is moving substantial amounts of sand a mere 75 miles. The railroad states that this short haul traffic, generally conceded to trucks years ago by the Class I railroads, has returned to it now because its pricing and service compare favorably to that for truck movements.[11]

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[10] Journal of Commerce, July 22, 1991.

[11] *Ibid.*

III METHODOLOGY

Since the ICC exempted Class II and Class III carriers from filing financial, physical, and operating data, analysis of their financial and physical condition is severely handicapped. Furthermore, many of these carriers are privately owned and do not file financial reports with the Securities and Exchange Commission. To determine the need and demand for loan guarantees, the FRA surveyed Class II and Class III carriers, gathering general financial and operating data as well as their past experiences with the capital markets.

To determine the amount of investment these carriers felt they needed to maintain their systems and to meet expected growth, the FRA asked respondents to estimate three spending levels:

1. The amount they need at present to put their railroad in the condition they feel appropriate for their level of traffic;
2. The additional amount they would need over the next 5 years to maintain their physical plant in that condition; and
3. The amount of new investment they would require to adequately meet the demands of expected traffic growth.

These three spending levels—*present*, *future*, and *potential*—were termed "spending goals." Carriers were also asked to break these investments down into specific categories—locomotives, rolling stock, track and track maintenance, and improvement to structures—and to estimate how much of these goals could be funded internally or through conventional loans. The amount of investment the railroads felt they could not complete

represented a starting point for estimating the level of borrowing that might occur under a Federal loan guarantee program. (See "Appendix A" for a copy of the survey.)

The financial data compiled from the survey were used to evaluate the respondents' probable ability to repay loans, since repayment ability is a requirement of the Section 511 program. Estimates were developed for the amount of guarantee authority required to meet the desired spending goals of those carriers with the ability to repay, if loan guarantee authority were provided by Congress in the future.

To gain added perspective on shortline railroad capital requirements, FRA interviewed state rail planning officials knowledgeable about the present and future financing needs of small railroads. Additionally, commercial and investment bankers experienced in lending to shortlines were interviewed to determine their overall perceptions about this market, as well as their criteria for making loans.

Scope of the Survey

Preparation of the study first required a determination of the Class II and Class III carriers to be surveyed. A number of sources were used to make this determination: the Association of American Railroads *Profiles of U.S. Railroads'* (*Profiles*), Edward Lewis'

Shortline Railroad Guide, membership lists from the American Short Line Railroad Association and Regional Railroads of America, and FRA internal sources.

There are approximately 50 Class II and Class III carriers owned and controlled by Class I parents. These railroads were removed from the survey universe under the presumption that the Class I would use its financial resources (internally generated funds and borrowing power) to maintain its subsidiary. Furthermore, most of these carriers are considered to be integral parts of their Class I parents, with financial data consolidated in the parents' balance sheets and income statements. Elimination of these carriers, as well as 40 railroads listed in our sources but found to have ceased operations or to have been absorbed by another carrier, left a universe of 490 railroads to survey.

IV FINDINGS

Profiles of Survey Respondents

The FRA received responses from 339 railroads—17 out of 23 Class II's and 322 out of 467 Class III's—70 percent of the 490 independent Class II and Class III railroads that were surveyed.[12] The majority of responding railroads (213) were created or came under their present ownership after 1980, demonstrating the impact of the Staggers Rail Act of 1980 and related decisions in encouraging the formation of new small railroads.

From the survey, traffic levels in 1990 for individual Class II's ranged from a high of 551,000 carloads to a low of 37,000. An average Class II carrier handled 153,630 carloads in 1990, a drop of nearly 5 percent compared to the previous year, when average carloads were 162,796. Class II railroads served an average of 106 shippers and were responsible for maintaining an average of 532 miles of track. Traffic density for these carriers was nearly 289 carloads per mile. (See Table 1, page 14.)

In contrast, Class III traffic levels for 1990 ranged from a high of 186,000 carloads to as few as 2 carloads. Class III's also experienced a 5 percent loss in average traffic levels from 1989-1990, falling from 10,762 to 10,258. They served an average of 15 shippers on

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[12] Even though the ICC classification requirements state that a carrier must remain within a revenue category for three consecutive years, for purposes of this study, if the carrier noted on the survey that it had revenues above $18.7 million, it was considered to be a Class II. By ICC definition, all switching and terminal carriers are a part of the Class III category.

54 miles of track; traffic density averaged 181 carloads per mile. Most of the Class III's reporting carloads in the higher ranges—more than 50,000—are switching and terminal carriers, which, by their very nature, have greater densities than most small line haul carriers. When switching and terminal carriers are removed, the remaining Class III carriers have an average density of around 122 carloads per mile, with a range between 1 and 5,100 carloads per mile.

To determine how typical survey respondents were compared with all Class II and Class III's, survey averages were matched with average carload and mileage data for 516 Class II and Class III railroads found in *Profiles*. In *Profiles*, Class II and Class III carriers averaged about 10 percent fewer carloads and miles compared to survey respondents.[13] It appears that smaller carriers were less likely to respond to the survey than larger carriers.

Interest In Loan Guarantees

Carriers were asked to return an abbreviated survey if they were not interested in, or did not foresee a need for, a Federal loan guarantee. Of the 339 total respondents, 221 filled out only the abbreviated survey. The 118 respondents interested in the program account for 24 percent of the total number of independent Class II and Class III railroads surveyed. Carriers formed since 1981 demonstrated a greater interest in a loan guarantee program than

[13] *Profiles of U.S. Railroads*, (Washington, D.C., 1990).

those formed prior to 1981. Of the 213 carriers formed since 1981 responding to the survey, 44 percent (81 carriers) reported an interest in loan guarantees; of the 126 respondents formed before 1981, only 20 percent (25 carriers) expressed interest.

TABLE 1

Summary of Survey Results

	# of Carriers	Average Carloads 1990	Average Carloads 1989	Average # Shippers per Carrier	Trackage Maintained (Miles)	Carloads per Mile
Class II						
Complete Survey	15	155,447	164,571	102	524	297
Abbreviated Survey	2	140,000	150,369	135	594	236
All Participating	17	153,630	162,796	106	532	289
		135,458*			515*	
Class III						
Local Railroads						
Complete Survey	76	7,290	7,538	19	73	102
Abbreviated Survey	145	8,545	8,781	17	58	149
All Participating	221	8,109	8,352	18	63	131
		8,620*			65*	
Switching & Terminal Carriers						
Complete Survey	27	10,347	9,360	17	42	246
Abbreviated Survey	74	16,766	18,486	6	30	528
All Participating	101	14,961	15,979	9	33	432
		8,439*			23*	
Total Class III						
All Participating	322	10,258	10,762	15	54	192
		8,900*			50*	

* Indicates averages for all Class II and Class III carriers, based on *Profiles*.

Carriers with lower densities—fewer carloads per mile—were expected to show the greatest interest in loan guarantees, since their lower traffic density would generate less revenue for maintenance and rehabilitation per mile of track. This proved to be the case for Class III carriers. Those completing the survey averaged fewer carloads per year on more miles of track than their Class III counterparts who did not express an interest in loan guarantees. Surprisingly, this was not the case for Class II's. The Class II's expressing an interest in loan guarantees had higher traffic densities than Class II's who completed only the abbreviated form.[14] Table 1 provides selected results for carriers completing the entire survey compared to those that returned only the abbreviated version.

Carriers completing the survey were asked to report items from their most recent income statement and balance sheet so that a general assessment could be made regarding their ability to qualify for loan guarantees. Based on these data, a comparison of the average operating ratios was made for different segments of the industry.[15] For 1990, the operating ratios for the Class II and Class III carriers that responded to the complete survey were 79.2 and 89.6, respectively. Class II operating ratios ranged from 53.7 to 102.2, while Class III's ranged from 36.9 to 187.8. (In comparison, the 1990 average operating ratio for Class I railroads was 86.9.)[16]

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[14] Some of the Class II carriers completing the survey had very high densities, increasing the average density and possibly distorting the results for Class II carriers in general. These carriers may, in fact, possess the financial strength to pursue projects without any government assistance.

[15] The operating ratio is calculated by dividing operating expenses by operating revenues. It serves as an indication of how efficiently the carrier is operating—the lower the ratio, the more efficient the operation.

[16] *Analysis of Class I Railroads, 1990*, Association of American Railroads, (Washington, D.C., 1990).

A review of the financial burden of these carriers, illustrated by the fixed-charge coverage ratio and the capital structure ratio, shows that on average these smaller railroads have much higher debt levels than the Class I's.[17] In 1990, the fixed-charge coverage ratio for the Class I industry was 3.7, while, for the Class II and Class III carriers that completed the survey, it was 1.52 and 0.75, respectively. These results suggest that the Class II carriers, while capable of servicing their debt, have less income left to invest, compared to Class I's. More important, the Class III's are unable to fully service their current debt with funds generated from operations, a direct result of the very high levels of debt carried by these railroads. These results are further confirmed by examining the capital structure ratio of the railroads; the greater the ratio the more the railroad depends on debt financing than equity investment. The ratio for the Class I railroads is 28.6 percent, compared to 78.3 percent for Class II's completing the survey, and 84.7 percent for Class III's.

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[17] The fixed-charge coverage ratio measures a carrier's ability to cover interest expenses on outstanding debt from net operating income generated during the year. A ratio of one indicates that available funds are just equal to the amount needed to meet debt service requirements, while a ratio greater than one indicates that a carrier generates more than enough cash to service its debt.

The capital structure ratio shows how leveraged a company is based upon its debt to debt plus equity ratio. It is used by lenders to assess additional debt load that a company can bear. As the ratio approaches 100, the carrier becomes more creditor-financed and less able to assume more debt.

Expenditure Goals of Carriers Completing Survey

The 118 carriers completing the survey reported that their present, future, and potential spending goals[18] through 1995 total nearly $1.77 billion; spending goals of the Class II carriers represent 69 percent ($1.22 billion) of this total, with the remaining 31 percent ($556 million) accounted for by the Class III's. These railroads anticipate that they will be able to fund $1.33 billion of this spending, leaving nearly $440 million unfunded (Table 2). While the Class III's goals totaled less than half the level of the Class II railroads, the smaller carriers reported that they are able to fund only a little more than half of their goals, while the Class II carriers completing the survey believe they can finance close to 90 percent of their goals. Class III carriers accounted for $272.2 million of unmet spending goals, while the Class II portion is $167.5 million.

Charts 1 and 2 show present, future, and potential spending goals for Class II and Class III carriers. These charts identify the attainable and unattainable estimated levels of spending for these railroads, based on internal funding and/or borrowing in the private capital markets. The results of the survey show that the Class II carriers believe that they will be able to accomplish most of their capital expenditures through 1995 with only minimal

[18] Defined earlier, present spending is the amount of investment needed to put the railroad in a condition that will maintain current traffic and service levels; future spending is the amount needed through 1995 to maintain the physical plant in that condition; potential spending is the amount of additional investment needed to adequately meet the demands of expected traffic growth and service through 1995.

TABLE 2
TOTAL PRESENT, FUTURE, AND POTENTIAL SPENDING GOALS OF REPORTING CARRIERS
($ in millions)

Class II Railroads Reporting
(15 carriers)

	Investment Goals[1]	Anticipated Available Funding[2]	Unmet Goals
Locomotives	$ 137.7	$ 123.6	$ 14.1
Rolling Stock	225.3	195.9	29.4
Track	329.8	261.8	68.0
Maintenance	456.8	417.5	39.3
Improvement to Structures	66.7	50.0	16.7
Sub Total	$1,216.3	$1,048.8	$167.5

Class III Railroads Reporting
(103 carriers)

	Investment Goals[1]	Anticipated Available Funding[2]	Unmet Goals
Locomotives	$ 58.0	$ 27.9	$ 30.1
Rolling Stock	101.5	66.1	35.4
Track	195.5	59.1	136.4
Maintenance	154.8	115.1	39.7
Improvement to Structures	46.0	15.4	30.6
Sub Total	$ 555.8	$ 283.6	$272.2

Total Carriers Reporting
(118 carriers)

	Investment Goals[1]	Anticipated Available Funding[2]	Unmet Goals
Locomotives	$ 195.7	$ 151.5	$ 44.2
Rolling Stock	326.8	262.0	64.8
Track	525.3	320.9	204.4
Maintenance	611.6	532.6	79.0
Improvement to Structures	112.7	65.4	47.3
Total	$1,772.1	$1,332.4	$439.7

[1] Total investment goals for all three levels combined.

[2] Funding anticipated to be available from internal and private capital sources.

CHART 1
Class II Spending Goals

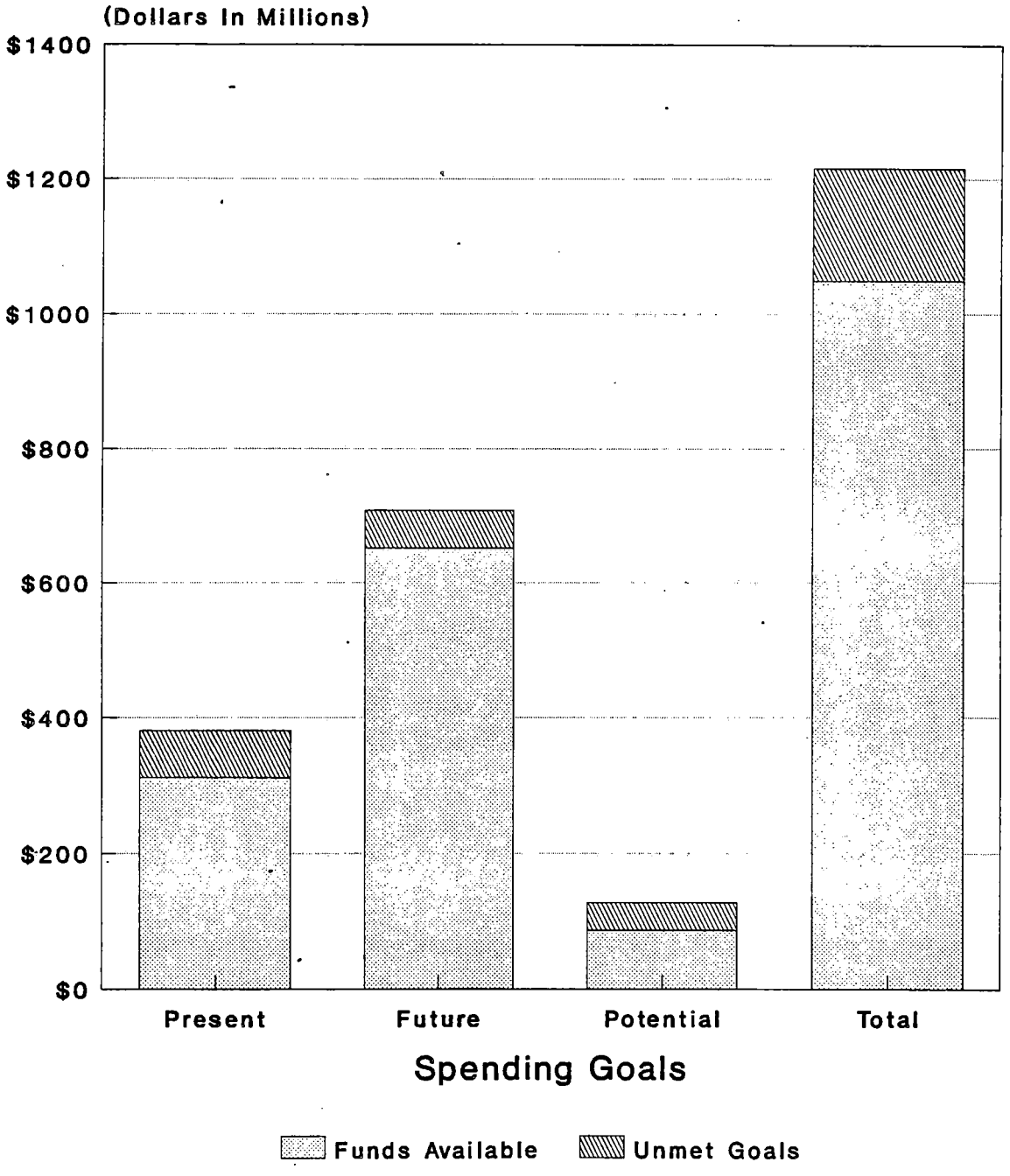
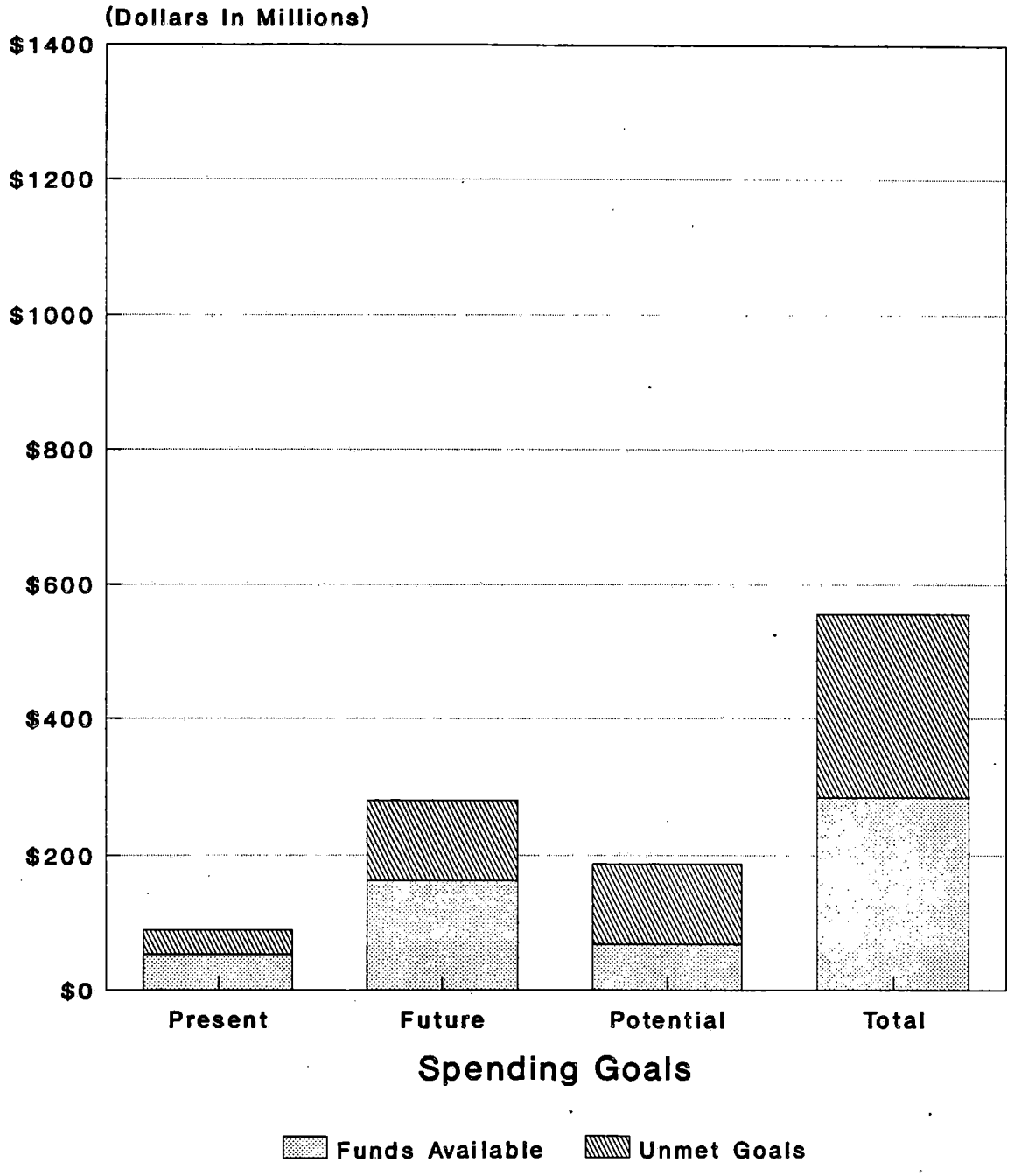


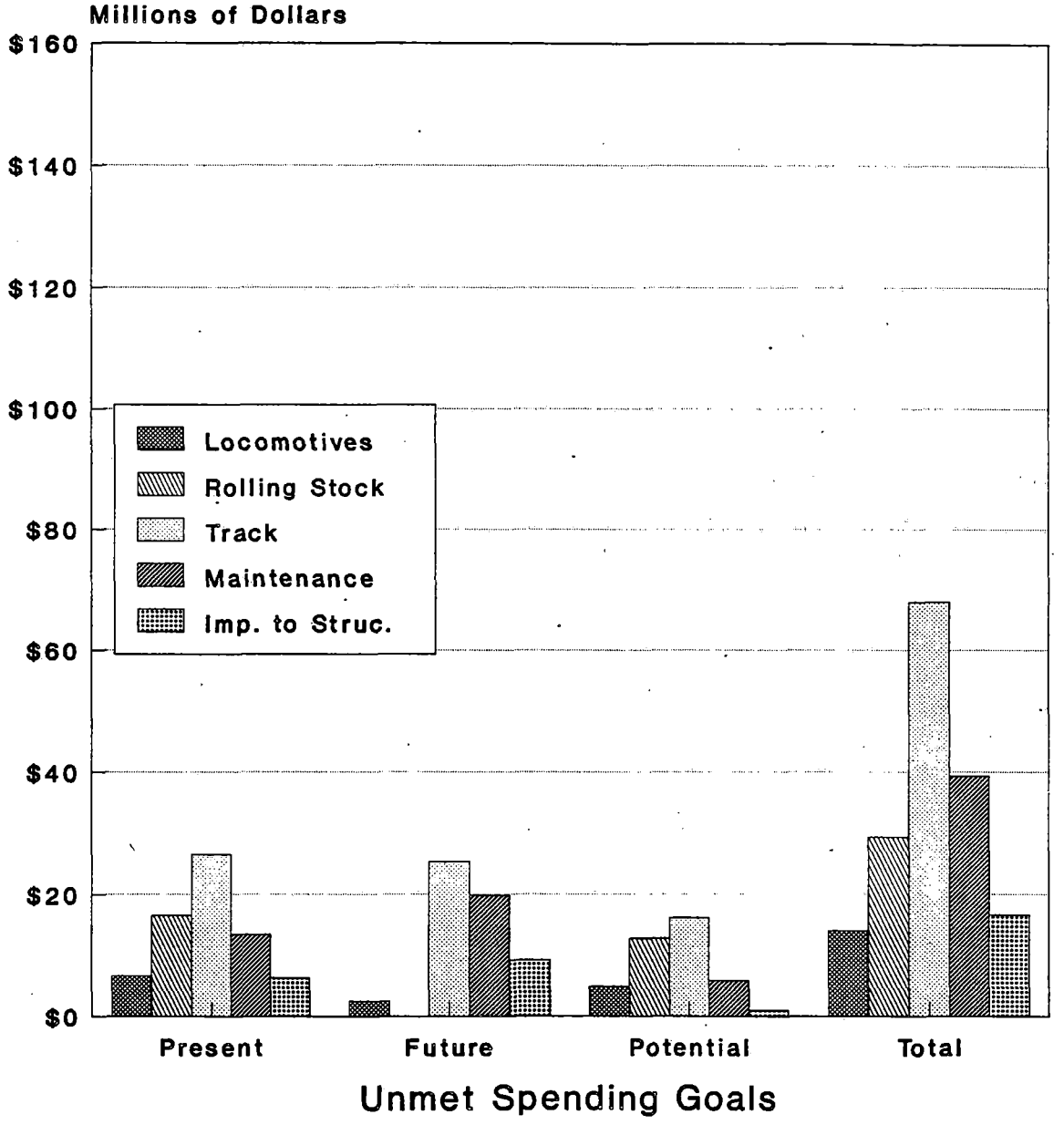
CHART 2
Class III Spending Goals



financing difficulties. While both Class II and Class III's anticipated problems financing projects to cover their expected growth in traffic—potential spending goals—Class III carriers also foresee serious difficulties funding present and future projects.

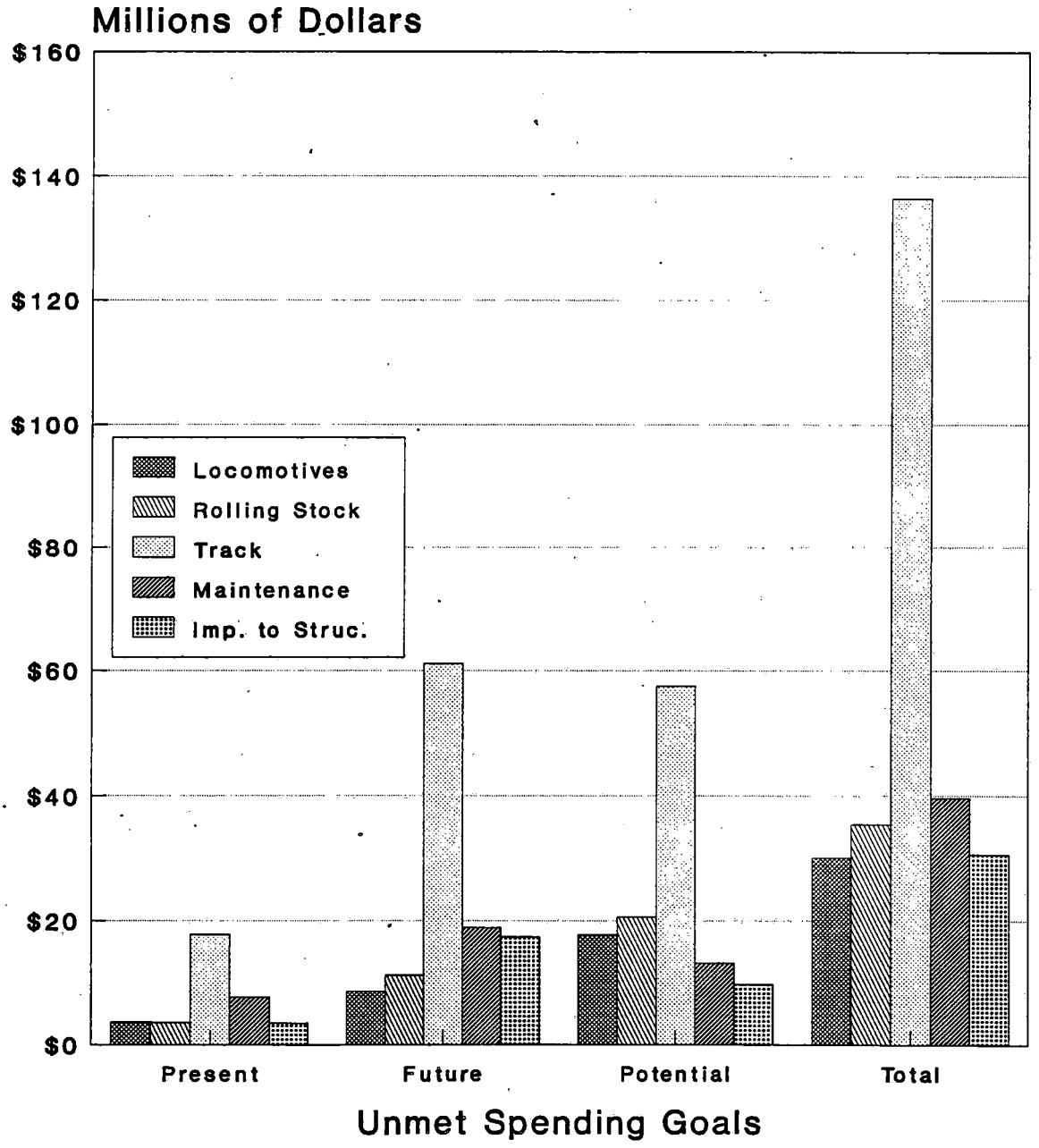
For both Class II and Class III carriers, spending for track rehabilitation makes up the greatest portion of expenditures for which they believe they will not be able to secure financing. Charts 3 and 4 show unmet spending goals for track work exceed those for locomotives, rolling stock, improvement to structures, and maintenance in each spending category—present, future, and potential. To sustain current service levels through 1995, the Class II carriers reporting unmet spending goals for track believe they will require an additional $51 million for rehabilitation, while the Class III's will require an additional $79 million. For the Class II's, this amounts to spending an additional $4,000 per mile for track each year from 1992 to 1995. The Class III's, with lower traffic densities, report they need even more—an additional $5,000 per mile of track for each year over the same period. When funding estimates for growth are included, requirements for Class II's remain the same, but Class III requirements rise to nearly $7,800 per mile each year.

CHART 3
Unmet Spending Goals of Class II Railroads



Note: Class II's estimated that they could meet all of their "Future" Rolling Stock needs.

CHART 4
Unmet Spending Goals of Class III Railroads



Refinancing

Many carriers, particularly those formed since 1981, carry substantial debt incurred in the original purchase of the line or from a subsequent refinancing. Typically, these debts must be repaid or refinanced before the carrier can secure any new loans, since the existing lenders have a senior lien on the railroad or portions of its property, and their prior consent is required for any new debt to be incurred.

Many of the original loans were made for relatively short periods—7 or 8 years—and often with relatively high interest rates. Generally, the railroads anticipated that after several years of successful operation, the original lender would allow the railroad to refinance with better terms or arrange longer term financing with an institutional investor, perhaps an insurance company or a pension fund. Carriers that were able to obtain refinancing at lower interest rates and/or for longer terms enjoyed healthier cash flows because of lower debt service. Stronger cash flows allowed these carriers more flexibility to devote funds to additional projects, such as track rehabilitation, or to restructure loans under more favorable terms, or to qualify for additional loans. However, several banks and railroads reported that financial organizations are now reluctant to refinance railroad loans because of concerns about excessive commitments to highly leveraged transactions, as well as overall tightened credit standards.

The survey asked the carriers to estimate the amount of corporate debt that they needed to refinance. The debt covered locomotives, rolling stock, investment in track and other structures, as well as acquisition financing. The total refinancing goal for the 118 carriers is nearly $290 million (Table 3): $19.8 million for locomotives, $53.5 million for rolling stock, $101.2 million for investment in track and other structures, and $114.7 million for acquisition debt. The total refinancing goal for Class III's formed after 1980 is $140.1 million—78 percent of the total Class III refinancing goal. For all carriers, refinancing acquisition debt accounted for 40 percent of the total refinancing goals.

TABLE 3
REFINANCING REQUESTS OF CLASS II AND CLASS III RAILROADS
($ in Millions)

	Locomotives	Rolling Stock	Investment in Track & Other Structures	Acquisition Debt	Total
Class II Railroads	$ 8.0	$ 34.0	$ 33.6	$ 33.5	$109.1
Pre-Staggers Class III Railroads	1.3	2.1	22.4	14.2	40.0
Post-Staggers Class III Railroads	10.5	17.4	45.2	67.0	140.1
Total Refinancing Goal	$ 19.8	$ 53.5	$ 101.2	$ 114.7	$289.2

V. SHORTLINE RAILROADS AND THE FINANCIAL MARKETS

Introduction

There are three important types of loans critical to smaller railroads: those for (1) capital expenditures—including track rehabilitation and improvement to structures; (2) acquisition of equipment—locomotives and rolling stock; and 3) acquisition of rail property. Although funding for acquisition of equipment appears to be available, small railroads are increasingly concerned that it is becoming more difficult to arrange financing for acquisition of rail property and for capital expenditures. Indeed, officials of small railroads interviewed said that only a limited number of banks would extend credit to them in these two areas.

Bankers are interested in financing only those projects or acquisitions where the carrier will have sufficient cash flow to repay the loan. But the unique nature of the railroad credit market, including certain bankruptcy constraints that may discourage potential creditors, makes it difficult for bankers and railroads to agree on loan terms. Class III carriers, with their low carloads per mile in addition to their highly leveraged character, may be viewed by banks as not generating sufficient revenues to cover current costs, let alone any additional spending.

In general, the credit markets can be relied on to channel funds to qualifying borrowers, notwithstanding the current problems in the banking industry. However, based on survey results and interviews with lenders, small railroads generally considered to be creditworthy may still have difficulty securing financing. There are several reasons for this. First, local banks that best "know the territory" have usually never made a railroad loan. They may well understand the outlook for local shippers, the need for the railroad, and its prospects, but the decision to make the first loan is a difficult one. If banks approach a railroad as a real estate transaction, their credit analysis is thwarted because of the difficulty in appraising a railroad's real estate. Bankers interviewed felt that a railroad line usually has few alternative uses. If it fails as a railroad, it would be difficult to find a different type of tenant, as might be the case with a warehouse or office building. If banks approach a railroad loan as a commercial loan, the railroad would have a problem with the short term of such a loan, which, moreover, is usually subject to annual review.

In addition, because the ICC no longer requires financial reports from Class II and Class III carriers, there is little public information available to bankers considering a loan to a small railroad. This makes any financial analysis of this industry and its individual members difficult. Moreover, there is little information concerning the performance of earlier loans. There is also a lack of familiarity with the market for second-hand track materials, with the industry's regulatory environment and insolvency laws, and with the methods for determining revenues and costs on branch lines put up for sale by Class I's.

Traditionally, when there are businesses that local banks do not understand, such as a new or start-up industry, some banks or finance corporations will specialize in that type of loan. For example, banks in the San Francisco Bay area are more willing to finance computer firms than banks in areas without clusters of such firms. Hence, start-up firms, even if not in the area, will seek loans from such banks. However, this has not happened in the railroad industry. There are banks that specialize in railroad loans, and even a few, perhaps eight, that specialize in loans to small railroads. The problem is that such banks typically have a minimum loan amount of $5 million to cover the cost of making such a loan. In addition to the usual credit checks and financial reviews and controls, the bank must examine the prospects of local shippers, the condition of the line and equipment, and arrangements with the Class I connections. These often require on-site visits, adding substantial travel costs as well as the banker's time. One banker who made such a loan stated that if he knew how much time and effort it would take, he would never have undertaken it. It all adds up to a substantial fixed cost to make a railroad loan, which can only be recovered if the loan itself is substantial and the yield adequate.

While these minimum borrowing requirements are chiefly associated with acquisition loans, the bankers interviewed made it clear that they are not interested in making loans to railroads beyond providing for the needs of those carriers with which they have already established a banking relationship, usually through providing acquisition financing.

These hurdles, as well as others discussed more fully below, have led to a sharp decline in the number of commercial lenders willing to provide loans for line acquisition and capital expenditures. There were approximately 15 commercial lenders in 1989, but only 8 in 1991.[19] However, carriers can still find numerous lenders willing to finance the purchase or lease of rolling stock. FRA interviews with lenders and small railroad officials as well as from the written comments on the loan guarantee survey provided insights to the underlying nature of these three types of loans and why loans for acquisitions and capital expenditures are difficult to obtain, while financing the purchase or lease of rolling stock and locomotives is much easier. The following sections will discuss, first from the railroads' perspective, why they believe financing is difficult to secure. Then, the elements of railroad loans will be examined from the lenders' perspective to show why banks refrain from making loans for the acquisition of rail lines and capital expenditures while they are eager to provide financing for rolling stock and locomotives.

Railroad Perceptions

Smaller railroads responding to the survey generally agreed that they face significant hurdles in obtaining financing. Not enough banks participate in railroad lending, amortization

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[19] "1990 Rail Finance Review and Directory," *Railway Age*, December 1989, pp. F5-F22. "1991 Rail Finance Review and Desk Book," *Railway Age*, December 1990, pp. 29-72. "1992 Railroad Financial Desk Book," *Railway Age*, December 1991, pp. DB1-DB40.

schedules are too short for the loans granted, and minimum loan size requirements imposed by banks that will provide financing are often too high for many small railroads.

Since there are so few of these lenders, they can be very discriminating when it comes to which projects and which acquisitions will be financed. However, small carriers believe that there are many potential lenders who refrain from making railroad loans because they do not understand the railroad business. Carriers believe that potential lenders' views on railroad lending are based on the bad experiences resulting from the bankruptcies of large carriers in the 1970s and early 1980s, such as the Chicago, Rock Island and Pacific Railroad or newly-formed smaller railroads, such as the Chicago, Missouri and Western. The railroads feel that national lending institutions, familiar with conditions associated with railroad lending, will only pursue acquisitions that are sufficiently large—in excess of $5 million—to cover their costs of making these loans. Many Class II and Class III carriers need smaller loans, which are not available from these private lenders. In fact, the survey indicated that the Class III's borrowing requirements are around $2.6 million dollars per carrier.

Carriers also reported that the loans they can obtain have such short amortization schedules, when compared to the economic life of the asset being financed, that annual payments for debt service consume excessive amounts of cash. According to both lenders and railroads, the typical railroad loan is for a period not exceeding 7 to 8 years. However, railroads argue that the assets being financed have a productive life of 15 to 30 years, and sometimes longer. They believe that with loan terms consistent with the life of the project, a

larger loan could be serviced and more long-term projects, such as track rehabilitation, could be undertaken.

Lender Perceptions

Lending for Track and Structures

According to commercial lenders, the most difficult type of loan for a small railroad to obtain is financing for improvements to track and structures (i.e., track rehabilitation, replacement of cross ties, signals, and improvements to rail structures). Lenders will rarely accept these items as collateral because of the difficulty of recovering on these assets if a carrier defaults or goes bankrupt. If a railroad declares bankruptcy, Section 1163 of the U.S. Bankruptcy Code requires the appointment of a trustee of the estate of the debtor. The trustee may continue interim rail operations, or chose to file for abandonment, or attempt to sell the railroad's assets for either continued rail use or salvage value, or restructure the railroad so that it may continue operations as a reorganized entity. Public pressures to retain railroad service may lead the trustee to attempt a sale or continued operation of the railroad, even in cases where abandonment and liquidation is in the best interest of creditors. If a sale is negotiated in a timely manner, the lender may recover some of the loan. However, if the railroad is operated by a trustee for any length of time, creditor recovery will be delayed and

the amount recovered may be reduced, as the railroad's assets are eroded in operations during the trusteeship.

Equipment Loans

Loans for equipment—locomotives and rolling stock—are perhaps the easiest for carriers to obtain, and, as the survey results show, carriers are able to realize much more of their investment goals for equipment than for track. One reason for this is the relative ease with which the asset can be repossessed if the carrier defaults or goes bankrupt. Under Section 1168 of the U.S. Bankruptcy Code, lenders can repossess equipment 60 days after a payment default. Therefore, rolling stock or locomotives can be repossessed and easily sold or leased to another carrier. Not only are banks willing to finance purchases or leases of rolling stock, and to a lesser degree locomotives, but there is a whole array of finance companies and manufacturers in this market who will provide this equipment through extending credit or leasing.

Acquisition Loans

Of all the loans bankers can provide to railroads, those for line acquisition are the most complex and difficult to structure. It was noted earlier that, during the 1980s, many

carriers were so highly leveraged at start-up that the majority of revenues generated went to service acquisition debt, while maintenance on the system was deferred. The short term for acquisition loans, usually 7 to 8 years, added to the problem.

With the experience that bankers active in the industry said they gained through the 1980s, they believe today that they can structure a loan that not only will allow the carrier to service its debt, but provide the railroad with adequate capital to operate and improve the system while providing reliable service to its customers. Structuring such a loan requires the preparation of a detailed and sound "business plan" based on projected revenues from anticipated traffic and projected expenses from rail operations. On the revenue side, the analysis must review carload data, mix of commodities, prospects that shippers will remain on the line, potential competition from trucks and water carriers, the number of connections with other carriers, and the effects that fluctuations in the economy will have on the carrier's ability to generate the forecasted revenues and service debt. On the cost side, the plan must look at the physical condition of the plant, labor costs, fuel costs, and an environmental assessment of the property to determine if there are likely to be any unexpected liabilities resulting from earlier contaminants on the property. While these measures have always represented good banking practice, banks today are more thorough in testing business plans for potential pitfalls.

This analysis gives the banker a realistic view of the operations of the railroad. The decision to make a loan, however, is usually based upon reviewing the results of a worst case

scenario, where there might be a loss of revenues from some unforeseen circumstance. The bankers that FRA interviewed indicated that these negative surprises—a major shipper closing or a bridge washout—are not uncommon occurrences. Structuring the loan on a worst-case scenario lowers the risk of loans having to be restructured or railroads going out of business. Not only do these loans face intense scrutiny prior to approval, bankers are also requiring more equity from the purchaser. Where bankers once preferred 20 to 25 percent equity, there have been reports that they now prefer more than 25 percent equity, to better ensure the owner's commitment to the enterprise. Finally, the costs of the preparation of a business plan can be significant and may be a barrier, in some instances, to obtaining financing for the purchase of a railroad.

The small railroads and bankers that FRA interviewed generally agreed that for every branch line that a Class I desires to sell, there are at least three bidders trying to acquire the line. Some of these lines are being sold without the need for bank financing, which suggests that there does not appear to be a problem in obtaining funds for railroad acquisition. Bankers said that, in line sales, the goal of most Class I railroads is to sell the line to the most viable operator—an operator who will market the services of the railroad, increase the customer base, and improve traffic levels. However, the bankers recognize that some Class I's in need of cash will sell to the highest bidder. Bankers feel that they can recognize these situations and will not provide financing when the purchaser offers too much for a line. Therefore, there appears to be no need for government loan guarantees to provide acquisition financing. If loan guarantees were available for acquisition financing, the easier loan terms

provided under such a program, and the shifting of default risk from the lender to the Federal Government would cause the bids on these lines to increase, directly benefiting only the Class I carriers. There would be no compensating benefit to shippers or the community since the line would have been sold anyway, although at a lower price.

VI. FEDERAL LOAN GUARANTEES AND CARRIER ABILITY TO REPAY

Congress requested that FRA determine the amount of guarantee authority required to meet the needs of the Class II and Class III carriers. Since the ability to repay is a primary criterion of a Section 511 loan guarantee, making this determination required that we make at least a rough assessment of a carrier's financial health. Respondents completing the entire survey provided sufficient financial data so that a general determination could be made regarding the amount that each carrier could afford to borrow. (It must be noted that much more information would be required to determine whether a specific railroad or project would actually qualify for the program if, in fact, guarantee authority were available.)

The first step in determining the impacts that a loan guarantee program could have on a carrier's investment goals required estimating the increase in railroad borrowing power resulting from refinancing existing debt at a longer term and lower interest rate. For the purpose of this analysis, it was assumed that all existing debt that the railroads reported in the survey was for loans with an 8-year term and an interest rate of 10 percent. The increase to each carrier's borrowing power due to lower debt service was calculated, based on loan terms of 16 years and interest rates of 8.5 percent, a proxy for provisions under a guarantee program. This increase was added to any existing borrowing capability to give the total borrowing power of each railroad.[20] This "borrowing power" was matched against unmet

[20] Railroads provided their net income and depreciation on the survey. This provided enough information to make a rough estimate of each railroad's cash flow.

spending goals to determine the amount of investment each carrier could undertake, assuming that 75 percent of cash flow would be available to support debt.[21]

This analysis placed the railroads into three categories: (1) those with the financial means to cover their spending goals without the aid of loan guarantees; (2) those railroads that need a loan guarantee to meet some or all of their spending goals, since they cannot qualify for financing under current loan requirements; and (3) those that could not repay any additional loans, even with loan guarantees.

Results of Analysis for Class II Carriers

While eight of the Class II's completing the survey indicated that they were interested in Federal loan guarantees, they nonetheless felt that they would be able to support all of their spending requirements with the funds and resources available to them. The analysis showed that with Federal loan guarantees, the remaining seven Class II's could refinance their entire outstanding loans of $109.1 million, freeing an additional $7.4 million annually that could be used to pay interest and principal on new loans. The enhanced cash flow[22] of these carriers

[21] The degree to which a carrier could meet its spending goal was determined by its estimated borrowing capability after refinancing. Investment was constrained at the goal level reported by the carrier, even if refinancing would theoretically allow higher spending levels.

[22] Enhanced cash flow for Class II's or Class III's represents the entire amount of funds available to carriers after refinancing to undertake additional investments.

would then support financing $117.5 million of their $167.5 million reported unmet spending goals for track, equipment, maintenance, and improvement to structures.[23]

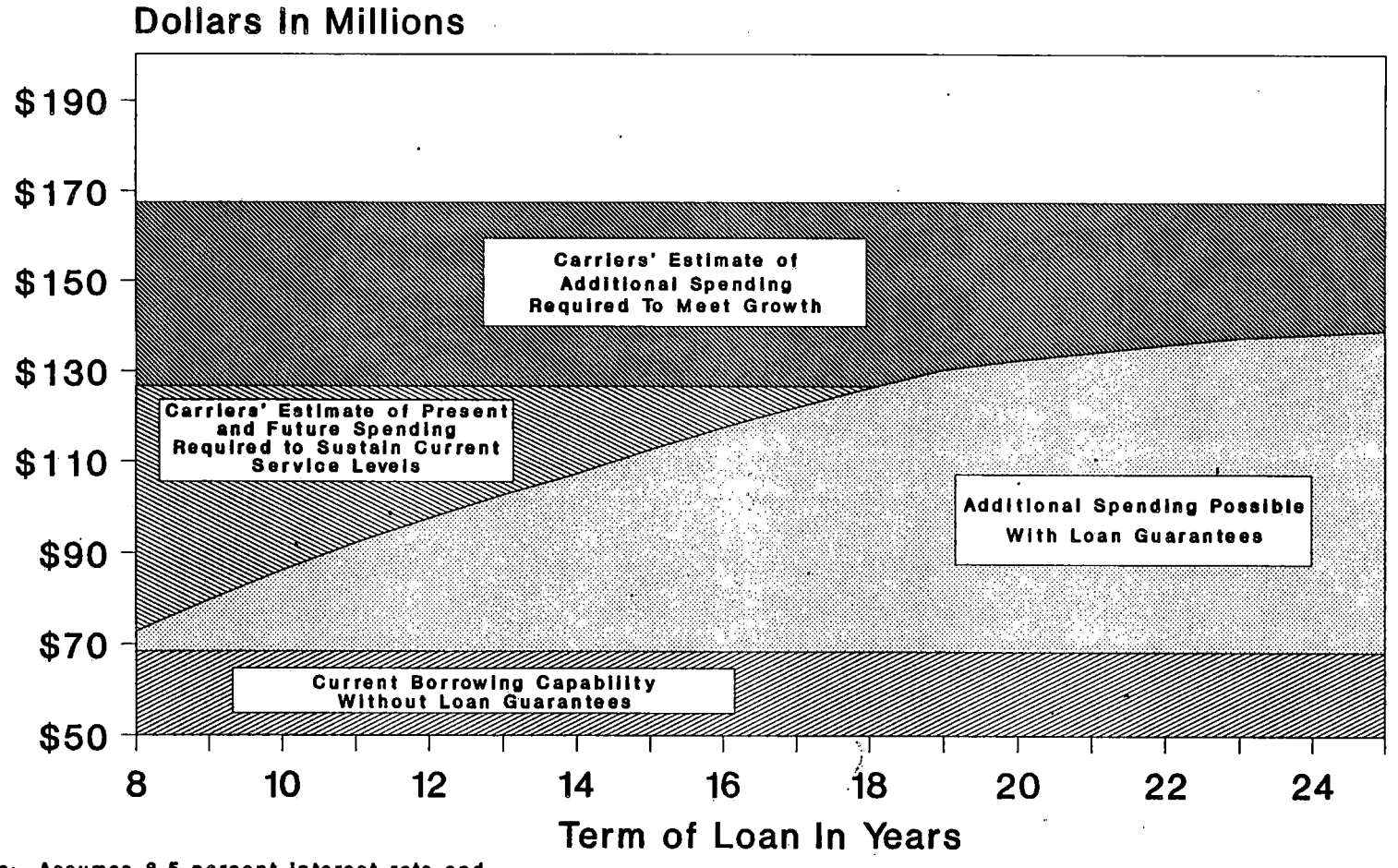
Chart 5 shows the impact on Class II railroads' borrowing power and coverage of spending goals resulting from extending the loan term. On the chart, both unmet spending goals and borrowing capacity without loan guarantees are held constant. As the chart shows, if the loan term were extended to 18 years, responding carriers could realize their estimated spending goals for sustaining current service levels. However, even a 25-year loan would not allow fulfillment of investment goals for potential growth for the Class II's as a whole.

Results of Analysis for Class III Carriers

Class III carriers reported that they would like to refinance $180.1 million with loan guarantees and then borrow another $272.2 million for equipment, track, and structures. Once again, assuming a 16-year term and an 8.5-percent interest rate, qualifying Class III's could refinance $155.8 million of their $180.1 million of outstanding loans, freeing $10.5 million. Enhanced cash flow could then support financing $84.3 million for improvements to track, equipment, and structures.

[23] Unmet spending for maintenance was considered to represent deferred maintenance, capitalized at the time the carrier performs rehabilitation to track and equipment.

Chart 5--Impacts of Federal Loan Guarantees On Unmet Spending Goals of Responding Class II Carriers



Note: Assumes 8.5 percent interest rate and 75 percent leveraging of cash flow.

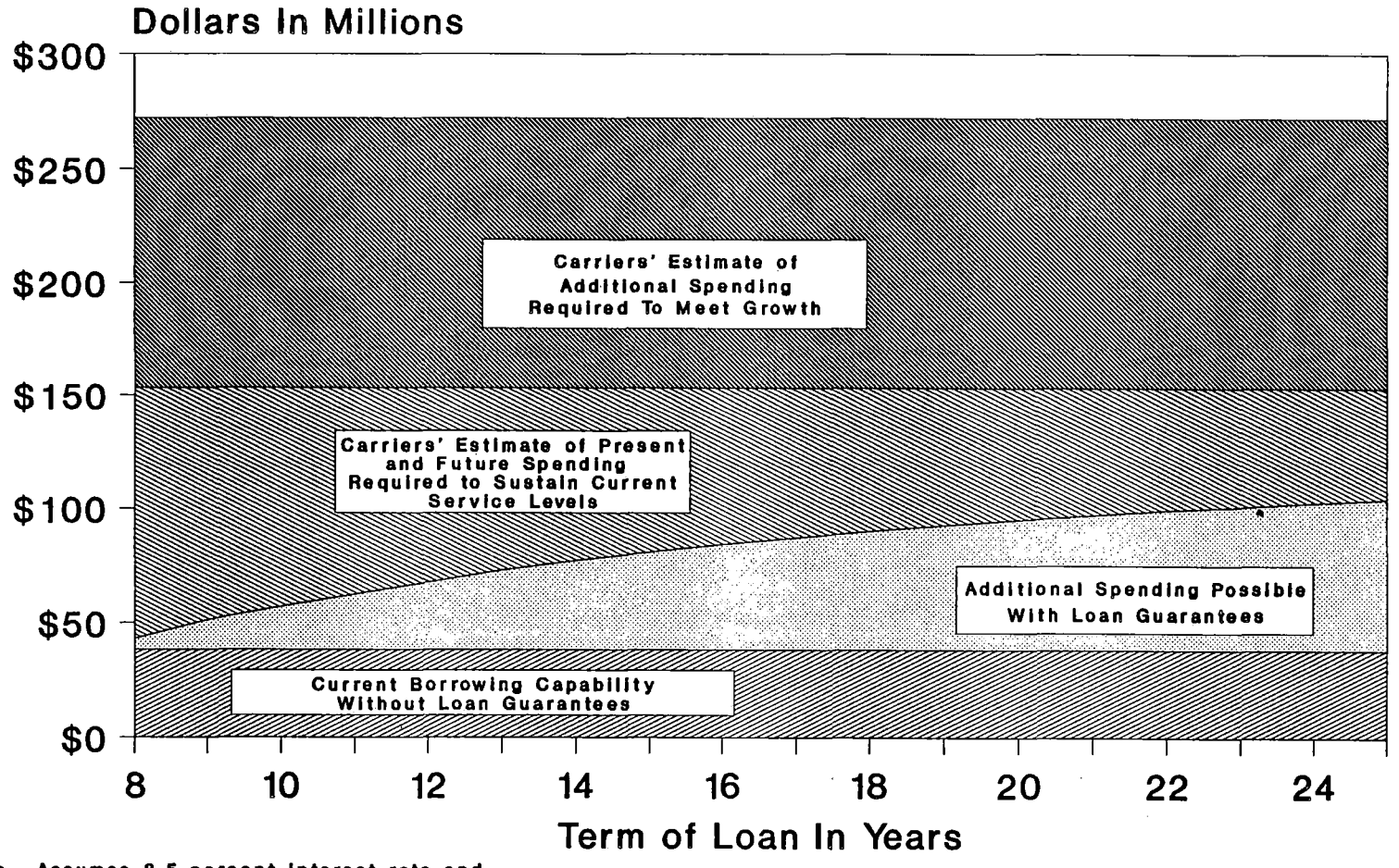
There were 21 Class III's interested in loan guarantees that could pursue their spending goals without any assistance. There were 63 Class III carriers that need a loan guarantee to meet some or all of their spending goals, since they cannot qualify for further financing under current loan requirements. However, even with guaranteed loans, these carriers could not undertake $139.7 million (62 percent) of their desired investment. Finally, 19 Class III's could not repay loans even with the more generous terms provided by loan guarantees; these carriers estimated that they needed $24 million for refinancing and $48 million for improvements.

Chart 6 shows the changes on Class III railroads' borrowing power and coverage of spending goals resulting from extending the loan term. Even with the additional borrowing that a loan guarantee program might provide, responding Class III's as a group would not be able to invest enough to sustain current service levels, regardless of the term.

Impacts of Different Loan Terms

The preceding analysis looked at the borrowing capabilities of the responding railroads under one set of assumptions. If different assumptions were used regarding interest rates, terms, and percentages of cash flow that might be leveraged, the amount that could be borrowed would change. With this in mind, a determination of the maximum amount these railroads could borrow, using perhaps unrealistic assumptions, against their investment goals

Chart 6--Impacts of Federal Loan Guarantees On Unmet Spending Goals of Responding Class III Carriers



Note: Assumes 8.5 percent interest rate and 75 percent leveraging of cash flow.

was developed by extending the loan term to 25 years and allowing them to use 100 percent of cash flow to support borrowing. Interest rates were left at 8.5 percent. Class II's could now borrow $145 million for track, equipment and structures, $27.5 million more than under the more conservative assumptions. For the Class III's, these changes made it possible for one additional railroad to refinance $300,000, bringing the total refinancing capability to $156.1 million. Their spending for equipment, track and structures increased to $121.7 million, $37.4 million more than before.

Thus, under a variety of loan guarantee terms reviewed in these analyses, the total borrowing capacity of the Class II's and Class III's would range from $466.5 million to $531.7 million. The conclusion remains that, under any reasonable range of assumptions regarding term, rate, and portion of cash flow devoted to debt repayment, a number of Class III railroads will have difficulty financing their needs, although a loan guarantee program could provide significant benefits to many railroads.

VII. OTHER OPTIONS FOR SHORTLINE FINANCING

As discussed in Section V, many of the smaller railroads may experience difficulty in securing financing under terms and conditions considered by them to be reasonable. While our analysis shows that some of these railroads may not be creditworthy under reasonable lending standards, others that appear creditworthy also may not be able to secure funds, because of the types of projects, such as track and structure rehabilitation. This section discusses some options for addressing the shortline financing needs that have been identified.

Role of State/Local Governments, Shippers, and Class I Railroads

Shortline railroads are more critical on a state and local level than they are to the national economy. With this in mind, there are several alternative sources for shortline railroad financing that are more appropriate than a Federal program. State and local economies, shippers, and Class I connections all share in the benefits provided by a successful shortline. Many of these organizations have already taken an active role. A number of states have taken over railroads that are not otherwise economically viable, or have leased lines they own to private operators. Many offer limited financial assistance to these carriers or their operators. A number of shippers also have taken over the small railroads that provide service to them, or have otherwise supported them. Some Class I railroads have become aware of the importance of their shortline connections, and, in some cases, are taking a much more active

role in insuring the survival of these smaller carriers. Examples of this type of assistance include joint marketing arrangements, leases where sales are not realistic, and technical assistance in areas such as accounting and car tracing.

Small Business Administration

The Small Business Administration's (SBA) existing program guarantees loans for up to $750,000 for businesses that meet their criteria. In one test of eligibility, SBA limits qualifying railroads to a maximum of 1,500 employees; for switching and terminal railroads, the maximum is 500 employees. As a group, Class III carriers appear to meet the test of a small business; yet some railroads indicated that their requests for funding have been denied. It appears that the SBA suffers from the same problem most banks have—they do not understand railroad lending. (One railroad suggested that some SBA officials are not aware that the agency may make loans to railroads.) With increased understanding of small carriers and their financing needs, an SBA program could be helpful to some railroads. However, even this approach would not satisfy a number of railroads with larger needs, since the average need is $2.6 million per Class III carrier.

The SBA also has programs that assist businesses that are the victims of natural disasters. Since many small railroads would face bankruptcy in the event of a bridge washout or major flood damage, the industry should consider making better use of these programs.

Risk Sharing

A loan guarantee program that allows loan terms to be extended has the potential to meet most of the Class II and a large part of the Class III financing needs. Carriers felt that a loan guarantee program would bring additional lenders into the railroad credit markets and would allow increased opportunity to borrow for longer terms. They believe that the risk sharing aspects of such a program would encourage bankers to participate in the market and, consequently, become more knowledgeable about the railroad industry.

As an alternative to the Federal government guaranteeing 100 percent of the loan, several carriers and bankers suggested that a loan guarantee should be for only a portion—perhaps 50 to 75 percent—of the value of a loan. The bank that makes the loan would still have an incentive to make sound loans, since its money was also at stake. The risk of the loan would be reduced because, with longer terms and lower rates, the repayment schedule would be less onerous. The guaranteed portion of the loan could be sold to institutional investors more easily than a conventional loan. Finally, making the guarantee for only a portion of the debt would leverage whatever funds are available for guaranteeing loans.

VIII. CONCLUSIONS

Shortline railroads are an important link in the national transportation system, and their importance is growing rapidly. A healthy shortline industry is vital to assure adequate transportation service for many smaller communities and to limit environmental damage from derailments.

While the shortline industry is generally healthy, the survey revealed that a significant number of the lines formed after the passage of the Staggers Rail Act of 1980 have unmet capital needs, particularly in the area of track and structures. It is also clear that the private capital markets may not be providing adequate financing for such investments, even in cases where the loans appear to have an otherwise acceptable level of risk.

However, the survey indicated that nearly 30 percent of the carriers responding to the survey will require financing from outside sources within the next 5 years, either to continue operations or to meet expected growth in demand. While the analysis has shown that a Federal loan guarantee program would have a beneficial impact, the responding Class III carriers, as a group, still would be unable to meet more than 50 percent of their needs for track, structures, and equipment financing. (The Class II's would be able to meet virtually all of their capital needs.) Even if the term of the loan were extended to 25 years, the interest rate were 8.5 percent, and carriers were able to leverage 100 percent of their cash flow—exceedingly generous assumptions—Class III's could only repay approximately

$278 million ($156.1 million for refinancing current debt, plus borrowing capability of $121.7 million in new loans for equipment, track, and structures) of their estimated needs of $452 million. Class II's could repay $254 million ($109.1 million for refinancing, plus $145 million for equipment, track, and structures) of their $276 million estimated request. Under these generous terms, all Class II's completing the survey would benefit from the program; however, only one additional Class III railroad could qualify, leaving 18 Class III's with total projected capital needs of $71 million that would go unmet.

Overall, the railroads that need loan guarantees to meet some or all of their spending goals and could qualify under the conditions presented in the analysis handle about 4 percent of the nation's total rail traffic; carriers that could not qualify handle about 0.4 percent of total traffic.

Those railroads having sufficient funds to cover their investment goals without the aid of loan guarantees had the highest traffic densities, indicating a traffic base that provides them with the revenues to support their goals; Class II's averaged 478 carloads per mile, and Class III's averaged 256 carloads per mile. The Class II's and Class III's that need loan guarantees to meet some or all of their spending goals had lower traffic densities, averaging 145 and 107 carloads per mile, respectively. Carriers not qualifying, which were only Class III's, had the lowest traffic densities, an average of 79 carloads per mile. This indicates that their traffic base is insufficient to support their investment needs.

The unique nature of the railroad business has made it difficult for conventional sources of finance to meet the needs of these smaller carriers. But the Federal Government is not the appropriate intervenor to meet these needs. States and local communities have the most direct stake in the success of small railroads in their areas. They are best positioned to gauge the appropriate level of intervention.

Appendix A

Survey Summary

The survey instrument consisted of five sections. The first two sections contained questions regarding revenues, traffic, and ownership, and were designed to profile railroads so they could be grouped throughout the study. At the end of these sections, the survey stated that carriers who were not interested in, or did not foresee a need for a Federal loan guarantee did not need to complete the rest of the survey.

Section 3 of the survey identified the dollars required by the carriers to maintain their systems. The carriers were asked the percentage of spending needs that they would be unable to fulfill from what they considered to be the level of spending required to maintain the system at reasonable service levels. This number represented the *present needs* of the carriers (See Question 3.1). To further explore why these needs were not met, the survey inquired into issues concerning problems the railroads felt they were having obtaining loans. (See Question 3.2)

For those carriers that were able to obtain funding, the survey asked them to note the sources where funds were obtained. In addition, the survey requested the terms of the loan(s) they were able to negotiate. (Questions 3.3 and 3.6)

Section 4 of the survey looked at the railroads' needs to maintain their facilities through 1995, *future needs*, and also the needs of the carrier to meet expected growth, *potential needs*. The percentage of these needs the carrier was unable to fund was an additional shortfall in investment, over and above any unrealized expenditures identified under present needs. Section 4 further asked the railroads to indicate the dollars required for refinancing locomotives, rolling stock, track and other structures, and acquisition debt. Finally, Section 5 requested financial data from each carrier's most recent Income Statement and Balance Sheet.

CLASS II/CLASS III RAILROAD SURVEY
FEDERAL LOAN GUARANTEE STUDY

OMB Approval
2130-0531

Section 1 - Railroad Identification

The purpose of this section is to properly identify the railroad, its address, its appropriate classification, and its traffic levels.

1.1 Railroad Name and Address.

(Affixed by FRA)

1.2 Is the information in 1.1 (above) correct?

Yes ___ No ___

Corrected Information:

Railroad Abbreviation:

Name:

Address:

Phone:

1.3 Is this a Class II or a Class III Railroad?

Class II ___ (Revenues greater than to $18.7 million)

Class III ___ (Revenues less than or equal to $18.7 million)

1.4 Total Revenue Carloads: 1990 _____ 1989 _____

1.5 How many shippers did this railroad regularly serve in 1990? _____

Section 2 - Type of Ownership/Control

The purpose of this section is to develop information on how many Class II and Class III railroads fall within the various classes of ownership, e.g., independent, subsidiaries of larger railroads, and how many provide service as operators, but do not own the underlying track and roadbed.

2.1 Please indicate the year this railroad came under its present owner. _____

2.2 If the change in ownership was 1987 or later, please indicate the name of the seller.

_____

2.3 Who is financially responsible for track and structure improvements on this railroad?

a. Carrier ____ b. Other Owner ____

2.4 How many miles of track does this railroad have the responsibility of maintaining? _____

2.5 Please indicate the category that best describes the carrier's ownership. (Please check the appropriate category.)

a. Subsidiary of a Class I railroad. ____

b. Jointly owned by several Class I railroads. ____

c. Subsidiary of railroad, other than Class I, which owns other Class II or III railroads. ____

d. Shipper owned ____

e. Independent ownership. ____

f. Government ownership. ____

g. Other (Please describe: _____ ____

_____)

If you are not interested or do not foresee a need in the Federal loan guarantee program provided for by § 511 of the Railroad Revitalization and Regulatory Reform Act of 1976, you do not need to proceed with the questionnaire. Please return the form in the envelope provided. We appreciate your effort in answering the previous questions.

Section 3 - LOCOMOTIVES/ROLLING STOCK/TRACK MAINTENANCE/CAPITAL EXPENDITURES

This section is designed to determine your experiences when financing or attempting to finance major projects during the past five years.

3.1 Within the past five years (1986-1990), for the following items, what were your requirements to maintain your system and provide an appropriate level of service? Please note in the space provided the percentage of these requirements you were unable to achieve because financing could not be arranged.

	Dollar amount required to maintain system	% of needs not met
Locomotives (total dollars)	$_____	_____ %
Amount Committed To:		
Purchase	$_____	
Lease	$_____	
Rebuild	$_____	
Rolling Stock (total dollars)	$_____	_____ %
Amount Committed To:		
Purchase	$_____	
Lease	$_____	
Rebuild	$_____	
Investment in track other than routine maintenance	$_____	_____ %
Routine maintenance	$_____	_____ %
Improvements to structures (e.g. bridges, signals)	$_____	_____ %

3.2 Within the past five years (1986-1990), please check in the space provided below conditions that precluded financing needed improvements.

	Your Problems With Loan Package			Lender's Problems with extending credit			
	excessive interest rate	length of loan/lease	% of project financed	inadequate collateral	lender's perception of project merit	below lender's minimum loan amount	other
Locomotives:							
Purchase/rebuild	____	____	____	____	____	____	____
Lease	____	____	____	____	____	____	____
Rolling Stock:							
Purchase/rebuild	____	____	____	____	____	____	____
Lease	____	____	____	____	____	____	____
Investment in track other than routine maintenance	____	____	____	____	____	____	____
Improvement to structures (e.g. bridges, signals)	____	____	____	____	____	____	____

If you checked other, please explain.

_____

_____

_____

3.3 Over the past five years (1986-1990), for those needs you were able to pursue, please indicate by percentage the funding sources employed.

	Locomotives		Rolling Stock		Capital Improvements		Expensed Maintenance	
Sources:	purchase/ rebuild	lease	purchase/ rebuild	lease	track	structures	track	structures
Internally generated	___%	___%	___%	___%	___%	___%	___%	___%
Private borrowing								
Commercial banks	___%	___%	___%	___%	___%	___%	___%	___%
Major finance corp. (e.g. Westinghouse, GE)	___%	___%	___%	___%	___%	___%	___%	___%
Any government loans guarantees or grants	___%	___%	___%	___%	___%	___%	___%	___%
Security Issuance								
New equity	___%	___%	___%	___%	___%	___%	___%	___%
New debt	___%	___%	___%	___%	___%	___%	___%	___%
Loan/lease from seller	___%	___%	___%	___%	___%	___%	___%	___%
Other _____	___%	___%	___%	___%	___%	___%	___%	___%
TOTAL	100%	100%	100%	100%	100%	100%	100%	100%

3.4 From the categories listed below, please check the one that best categorizes your principal source of funding.

Commercial Bank ___; Major Finance Corp ___; State/Local Govt ___;
Fed Govt ___; Security Issuance ___; Other ___

If you checked other, please describe.

_____

_____

_____

3.5 For those major projects pursued, if you were seeking a longer maturing loan, were you prepared to pay a higher interest rate? Yes ___ No ___

If yes, which types of projects?

_____

_____

_____

3.6 For those needs met from outside sources, please indicate the terms of the loan by type of project. If you had more than one project in a category, enter the average.

	length of loan/ lease	interest rate	% of project financed	proportion of total assets pledged as collateral: equipment	proportion of total assets pledged as collateral: company
Locomotives:					
Purchase/rebuild	____yr(s)	____%	____%	____%	____%
Lease	____yr(s)	____%	____%	____%	____%
Rolling Stock:					
Purchase/rebuild	____yr(s)	____%	____%	____%	____%
Lease	____yr(s)	____%	____%	____%	____%
Investment in track other than routine maintenance	____yr(s)	____%	____%	____%	____%
Routine maintenance	____yr(s)	____%	____%	____%	____%
Improvement to structures (e.g. bridges, signals)	____yr(s)	____%	____%	____%	____%

Section 4 - Projected Needs and Refinancing of Debt: (1991-1995)

4.1 Over the next five years (1991-1995), what are your requirements for rehabilitation or other capital expenditures necessary to maintain your facilities to most economically and efficiently preserve current service and traffic levels? Also indicate the percentage of these requirements you anticipate you will be able to meet. After referring to the KEY at bottom of the page, in the column, "Source(s) of funding," circle the appropriate number(s) that best categorizes the principal sources of anticipated funding.

	Dollars required to maintain facilities	% of requirements obtainable	Source(s) of funding
Locomotives			
acquisition/lease	$_____	_____ %	1 2 3 4 5 6 7
rebuilding	$_____	_____ %	1 2 3 4 5 6 7
Rolling Stock			
acquisition/lease	$_____	_____ %	1 2 3 4 5 6 7
rebuilding	$_____	_____ %	1 2 3 4 5 6 7
Investment in track other than routine maintenance	$_____	_____ %	1 2 3 4 5 6 7
Routine maintenance	$_____	_____ %	1 2 3 4 5 6 7
Improvements to structures (e.g. bridges, signals)	$_____	_____ %	1 2 3 4 5 6 7

If other (No. 7) was circled for sources of financing, please give a brief description.

_____

_____

_____

KEY: **1. Internally generated funds; 2. Commercial Banks; 3. Major Finance Corporations; 4. State/local Government; 5. Security Issuance; 6. Lease; 7. Other**

4.2 Over the next five years (1991-1995), what are your anticipated requirements to enhance your system to meet expected growth. Also indicate the percentage of these requirements you anticipate you will be able to meet. After referring to the KEY at the bottom of the page, in the column, "Source(s) of funding," circle the appropriate number(s) that best categorizes the principal sources of anticipated funding.

	Dollars required to maintain facilities	% of requirements obtainable	Source(s) of funding
Locomotives			
acquisition/lease	$_____	_____%	1 2 3 4 5 6 7
rebuilding	$_____	_____%	1 2 3 4 5 6 7
Rolling Stock			
acquisition/lease	$_____	_____%	1 2 3 4 5 6 7
rebuilding	$_____	_____%	1 2 3 4 5 6 7
Investment in track other than routine maintenance	$_____	_____%	1 2 3 4 5 6 7
Routine maintenance	$_____	_____%	1 2 3 4 5 6 7
Improvements to structures (e.g. bridges, signals)	$_____	_____%	1 2 3 4 5 6 7

If other (No. 7) was circled for sources of financing, please give a brief description.

_____

_____

_____

4.3 For the categories listed below, indicate the amount of your refinancing needs?

Locomotives $_____

Rolling Stock $_____

Investment to track and other structures $_____

acquisition debt $_____

KEY: 1. Internally generated funds; 2. Commercial Banks; 3. Major Finance Corporations; 4. State/local Government; 5. Security Issuance; 6. Lease; 7. Other

4.4 If you are considering refinancing, how important is:

Longer repayment schedule? very important ___; important ___; not important ___

Better interest rate? very important ___; important ___; not important ___

Other _____

4.5 What benefits, if any, do you believe would result from a Federal loan guarantee program?

_____

_____

_____

_____

Section 5 - Financial Data

This section is designed to develop a financial profile of carriers. The data will be aggregated in categories that will be used in conjunction with other data collected, to best assess the Class II and Class III railroad's needs for a Federal loan guarantee program. By responding to these items, an accurate representation can be made to Congress concerning these needs.

5.1 Items to be supplied from most recent Income Statement:

a) Operating Revenue $_____

b) Operating expense (including depreciation expenses of $_____) $_____

c) Fixed Charges $_____

d) Net Income $_____

5.2 Items to be supplied from Balance Sheet:

a) Total Assets $_____

b) Current Assets $_____

c) Current Liabilities $_____

d) Long Term Debt $_____

e) Stockholders Equity $_____

APPENDIX B-1
PRESENT SPENDING GOALS OF REPORTING CARRIERS
EXPENDITURES TO MAINTAIN SYSTEM AT NORMAL STANDARDS (1986-1990)
($ in millions)

Class II Railroads Reporting
(15 carriers)

	Investment Goals	Anticipated Available Funding[1]	Unmet Goals	Unmet Goals As a Percent of Investment Goals
Locomotives	$ 33.9	$ 27.2	$ 6.7	19.8%
Rolling Stock	110.2	93.6	16.6	15.1
Track	101.1	74.6	26.5	26.2
Maintenance	122.7	109.2	13.5	11.0
Improvement to Structures	12.9	6.5	6.4	49.6
Totals	$380.8	$311.1	$69.7	18.3%

Class III Railroads Reporting
(103 carriers)

	Investment Goals	Anticipated Available Funding[1]	Unmet Goals	Unmet Goals As a Percent of Investment Goals
Locomotives	$ 11.4	$ 7.7	$ 3.7	32.5%
Rolling Stock	14.2	10.6	3.6	25.4
Track	26.5	8.7	17.8	67.2
Maintenance	30.7	23.0	7.7	25.1
Improvement to Structures	6.5	3.0	3.5	53.9
Totals	$ 89.3	$ 53.0	$36.3	40.7%

Total for Class II and Class III Railroads Reporting
(118 carriers)

	Investment Goals	Anticipated Available Funding[1]	Unmet Goals	Unmet Goals As a Percent of Investment Goals
Locomotives	$ 45.3	$ 34.9	$ 10.4	23.0%
Rolling Stock	124.4	104.2	20.2	16.2
Track	127.6	83.3	44.3	34.7
Maintenance	153.4	132.2	21.2	13.8
Improvement to Structures	19.4	9.5	9.9	51.0
Totals	$470.1	$364.1	$106.0	22.6%

[1] Funding anticipated to be available from internal and private capital sources.

APPENDIX B-2
FUTURE SPENDING GOALS OF REPORTING CARRIERS
EXPENDITURES TO MAINTAIN SYSTEM AT NORMAL STANDARDS (1991-1995)
($ in millions)

Class II Railroads Reporting
(15 carriers)

	Investment Goals	Anticipated Available Funding[1]	Unmet Goals	Unmet Goals As a Percent of Investment Goals
Locomotives	$ 82.4	$ 79.9	$ 2.5	3.0%
Rolling Stock	91.5	91.5	$ 0.0	0.0
Track	180.0	154.7	$25.3	14.1
Maintenance	307.5	287.6	$19.9	6.5
Improvement to Structures	46.7	37.4	$ 9.3	19.9
Totals	$708.1	$651.1	$57.0	8.0%

Class III Railroads Reporting
(103 carriers)

	Investment Goals	Anticipated Available Funding[1]	Unmet Goals	Unmet Goals As a Percent of Investment Goals
Locomotives	$ 21.9	$ 13.3	$ 8.6	39.3%
Rolling Stock	42.9	31.7	$ 11.2	26.1
Track	93.6	32.5	$ 61.1	65.3
Maintenance	94.2	75.3	$ 18.9	20.1
Improvement to Structures	26.9	9.5	$ 17.4	64.7
Totals	$279.5	$162.3	$117.2	41.9%

Total for Class II and Class III Railroads Reporting
(118 carriers)

	Investment Goals	Anticipated Available Funding[1]	Unmet Goals	Unmet Goals As a Percent of Investment Goals
Locomotives	$ 104.3	$ 93.2	$ 11.1	10.6%
Rolling Stock	134.4	123.2	$ 11.2	8.3
Track	273.6	187.2	$ 86.4	31.6
Maintenance	401.7	362.9	$ 38.8	9.7
Improvement to Structures	73.6	46.9	$ 26.7	36.3
Totals	$ 987.6	$813.4	$174.2	17.6%

[1] Funding anticipated to be available from internal and private capital sources.

APPENDIX B-3
POTENTIAL SPENDING GOALS OF REPORTING CARRIERS
EXPENDITURES TO ENHANCE SYSTEM TO MEET GROWTH NEEDS (1991-1995)
($ in millions)

Class II Railroads Reporting
(15 carriers)

	Investment Goals	Anticipated Available Funding[1]	Unmet Goals	Unmet Goals As a Percent of Investment Goals
Locomotives	$ 21.4	$ 16.5	$ 4.9	22.9%
Rolling Stock	23.6	10.8	12.8	54.2
Track	48.7	32.5	16.2	33.3
Maintenance	26.6	20.7	5.9	22.2
Improvement to Structures	7.1	6.1	1.0	14.1
Totals	$127.4	$ 86.6	$ 40.7	32.0%

Class III Railroads Reporting
(103 carriers)

	Investment Goals	Anticipated Available Funding[1]	Unmet Goals	Unmet Goals As a Percent of Investment Goals
Locomotives	$ 24.7	$ 6.9	$ 17.8	72.1%
Rolling Stock	44.4	23.8	20.6	46.4
Track	75.4	17.9	57.5	76.3
Maintenance	29.9	16.8	13.1	43.8
Improvement to Structures	12.6	2.9	9.7	77.0
Totals	$187.0	$ 68.3	$118.7	63.5%

Total for Class II and Class III Railroads Reporting
(118 carriers)

	Investment Goals	Anticipated Available Funding[1]	Unmet Goals	Unmet Goals As a Percent of Investment Goals
Locomotives	$ 46.1	$ 23.4	$ 22.7	49.2%
Rolling Stock	68.0	34.6	33.4	49.1
Track	124.1	50.4	73.7	59.4
Maintenance	56.5	37.5	19.0	33.6
Improvement to Structures	19.7	9.0	10.7	54.3
Totals	$314.4	$154.9	$159.5	50.7%

[1] Funding anticipated to be available from internal and private capital sources.