Review of the Branch-Line Policy Established by the Railroad Revitalization and Regulatory Reform Act of 1976

Benjamin J. Allen,* Department of Economics, Iowa State University, Ames

The purpose of this paper is to define and analyze the new rail branchline policy established by the Railroad Revitalization and Regulatory Reform (4R) Act of 1976. On the basis of the statutory provisions, relevant Interstate Commerce Commission and Federal Railroad Administration regulations, and comments filed by the various parties in the relevant abandonment rule-making proceedings, the paper addresses the major procedural and substantive changes regarding abandonment and local rail service assistance and their effects on the allocation of resources in the rail industry and on the balance of power among the various groups involved. One of the important changes made by the 4R Act is the new advance-notice requirements, which include the system diagram maps and the new notice of intent. Another important addition to the procedures is the provision enabling people, firms, and communities to make financial offers; the railroads and the offerors of financial assistance are also permitted to negotiate an agreement that would keep the line in service. In addition, new accounting standards for branch lines and abandonments and a new local rail continuation subsidy program were established. The statutory provisions and regulations do not, however, clarify the criteria by which petitions are granted or denied. One major conclusion is that the new branch-line policy may not help the railroads because the policy has not increased the probability that a particular line will be permitted to be abandoned and, furthermore, the allowed subsidy may not be compensatory. The new branch-line policy may also bring less efficient allocation of resources than the old policy.

The bankruptcies of the Penn Central and several other northeastern railroads in the early 1970s produced the fear of mass abandonments and the realization that railroads were no longer capable of cross-subsidizing uneconomic branch lines. In recognition of the need for facilitating rail abandonment by more expeditious and less expensive methods, the Interstate Commerce Commission (ICC) developed the "34-carload" rule.

mission (ICC) developed the "34-carload" rule.

At about the same time, Congress passed the Regional Rail Reorganization (3R) Act of 1973, which established, among other things, a new branch-line policy that would apply only to a 17-state region in the Northeast and Midwest. This new federal policy for the 17-state region was based on two premises. First, the railroads should not be forced and cannot afford to continue to cross-subsidize uneconomic rail services. Second, those rail users and communities that are economically dependent upon the cross-subsidized rail service should not be unduly disadvantaged by this policy change. The new policy requires the use of an external subsidy.

The Railroad Revitalization and Regulatory Reform (4R) Act of 1976 indicates that the basic branch-line policy developed in the 3R Act will continue but on a national scale. The 4R Act does make, however, important procedural and substantive changes in the branch-line policy.

The purpose of this paper is to attempt to define and analyze the new federal branch-line policy as finally established by the 4R Act. The sections in the act that are most relevant to the branch-line issue are discussed first. The new abandonment procedures are discussed, and then the subsidy and financial assistance provisions are reviewed and analyzed. The major implications of

the new branch-line policy and procedures are discussed and conclusions are then drawn.

4R ACT AND THE BRANCH-LINE ISSUE

Almost all sections of the 4R Act affect, directly or indirectly, the viability of branch lines and thus are relevant to the branch-line issue. The most relevant sections are discussed below.

Sections Directly Addressing the Branch-Line Issue

Title 8 (Local Rail Service Continuation) of the 4R Act contains most of the provisions that establish the procedures and shape the policy with respect to light-density lines. In particular, sections 802 (Discontinuance or Abandonment) and 809 (Conversion of Abandoned Railroad Rights-of-Way) formed the basis of the rule making in which the ICC promulgated the new abandonment procedures and standards. Section 803 (Local Rail Service Assistance) contains the provisions establishing the amount of the subsidy for rail service continuation and the mechanism for allocating the subsidy to the states outside the 17-state region.

Sections 804 (Termination and Continuation of Rail Services) and 805 (Continuation Assistance) integrate the procedures for abandonment and the allocation of subsidy for the lines covered by the 3R Act with the program established by the 4R Act.

Several other sections not under Title 8 also have a direct effect on the branch-line issue. Section 904 (Rail Abandonment Report) of Title 9 (Miscellaneous Provisions) requires the U.S. Department of Transportation (DOT) to conduct a study of the potential effects of any abandonment of any line in the 31-state area outside the 17-state region. In addition, section 309 (Rail Services Planning Office, RSPO) of Title 3 (Reform of the ICC) requires the RSPO to develop an accounting system that will permit the collection and reporting by the railroads of branchline data.

Sections Having Indirect but Important Effects on Branch Lines

Section 303 (ICC Hearing and Appellate Procedure) requires the ICC to make a final decision within a certain time period, thus preventing the previous long delays in abandonment decisions. Section 307 (Uniform Cost and Revenue Accounting System) requires the ICC to issue regulations prescribing a uniform cost and revenue accounting and reporting system for all railroads by June of 1977. The ICC has stated that it will use this new accounting system on branch lines.

Section 503 (Classification and Designation of Rail Lines) of Title 5 (Railroad Rehabilitation and Improvement Financing) may have a very important effect on the continuation of local rail service for many communities. One use of the classification process is to help form priorities among groups of rail lines, including branch lines, for which applications for financial assistance have been made under section 505 (Rehabilitation and Improvement Financing).

Section 810 (Rail Bank) contains provisions that enable the Secretary of Transportation to purchase rail lines that serve areas in which fossil fuel, natural resources, or agricultural production are located.

NEW ABANDONMENT PROCEDURES

Although the 4R Act made a number of significant changes in the abandonment procedures, much of the basic framework remains. Many of the changes were made to integrate new subsidy provisions into the abandonment process.

Section 802, which added a new section 1a to the Interstate Commerce Act, formed the basis of the procedures implemented by the ICC and the RSPO in their joint rule-making proceeding in ICC Docket Ex Parte No. 274 (Sub-No. 2), Abandonment of Railroad Lines and Discontinuance of Rail Service. By order served on November 5, 1976, the ICC published its final regulations governing abandonment of rail lines and discontinuance of rail service. Several parties filed petitions for reconsideration of the final regulations. The ICC served its report on the petitions on May 3, 1977. In addition, 23 railroads and the Association of American Railroads (AAR) filed a petition of review of orders and regulations of the ICC's final regulatory terms as did a group of national railway labor organizations.

Important Changes in the Abandonment Procedures

The changes in the abandonment procedures discussed below are those that either contribute most in removing defects in the old procedures or have the most important implications for the carriers and/or shippers and communities.

New Advance-Notice Requirements

Possibly the most important procedural changes made were those that increase the awareness of the affected shippers and communities of the impending abandonment and assist them in responding to the abandonment filing. The ramifications of not providing advance warning have been studied (1, pp. 171-172). These changes resulted from the new statutory provisions and regulations that require each carrier to submit a diagram map and the new provisions increasing the information requirements of the notice of intent.

New section 1a(5) of the Interstate Commerce Act requires each carrier to submit to the ICC a diagram of its rail system. The section states that each diagram shall include "a detailed description of each line of railroad which is 'potentially subject to abandonment,' as such term is defined by the Commission" and "shall also identify any line of railroad as to which such carrier plans to submit an application for a certificate of abandonment of discontinuance in accordance with this section."

In its promulgation of the regulations, the ICC and the RSPO expanded the required number of categories to five

1. All lines that the carrier anticipates will be subject to an abandonment application within the 3-year period following the date on which the diagram is filed with the ICC.

- 2. All lines potentially subject to abandonment that the carrier has under study and believes may be subject to a future abandonment application because of anticipated operating losses or excessive rehabilitation.
- 3. All lines for which an abandonment application is pending before the ICC on the date on which the diagram is filed with the ICC.
- 4. All lines that are being operated under the rail service continuation provisions of section 1a(6)(a) or the Interstate Commerce Act or of section 304(c)(2) of the 3R Act, as amended, on the date on which the diagram is filed with the ICC.
 - 5. All other lines that the carrier owns and operates.

The system diagram map will serve a number of useful functions. Category 2 will make shippers and communities served by the rail service aware of the possibility of losing their rail service months before the actual abandonment application is filed. Thus, the shippers and communities can either take action to save the service (i.e., increase the use of the line, pay more for the service, arrange for a subsidy offer if the line is abandoned, etc.) or make plans to switch to alternative transportation modes. Several parties in the rule making argued that not all of the effects of categorizing may be positive. These parties argued that listing a line in category 2 would stigmatize the line and would preclude any possibility of industrial development or increased traffic.

Category 1 will serve a slightly different purpose by providing a minimum warning time for the shippers and affected communities. A line must appear in category 1 for at least 4 months before it can be put up for abandonment if the abandonment is opposed. Thus a shipper or community served by such a line should be in the final processes of switching to alternative modes, making final plans to challenge the abandonment, or making final arrangements to subsidize the line. This should reduce the resentment on the part of shippers and communities that is caused by a surprise abandonment application. A more rational, less emotional response from the shippers and communities should result from the new regulations.

Section 1a(2)(a) of the Interstate Commerce Act greatly expands and changes the type of public notice the carrier must serve before making an abandonment application.

The new notice of intent will advise people of their right to recommend approval, disapproval, or other action by the ICC. Furthermore, it advises interested persons on how to become parties to an abandonment proceeding and explains in detail how a person should file written comments or a petition to investigate. The notice also instructs interested people on how to obtain additional information concerning the abandonment or financial assistance for maintaining the line if it should be abandoned.

The new regulations with respect to notice of intent should make the affected shippers and communities much more knowledgeable of their most appropriate response. The railroads should benefit from these regulations, since the number of frivolous petitions should be reduced.

It should be noted that section 1a of the Interstate Commerce Act requires the ICC to institute an investigation on receipt of any petition requesting such an investigation. Before the 4R Act, the ICC could use its discretion in instituting an investigation when it received a petition to investigate. This procedural change may counterbalance the effect of the new notice-of-intent regulations.

New Financial Assistance Provisions

The new regulations relating to offers of financial assistance fall largely into two categories—those relating to the submission and evaluation of financial offers and those relating to the negotiations between the railroad and the offeror of financial assistance.

Section 1a(6)(a) of the Interstate Commerce Act outlines a procedure for the ICC to follow whenever it finds that public convenience and necessity permit abandonment so that offers of financial assistance can be made and evaluated. The ICC promulgated regulations that established a three-stage process for the submission and evaluation of financial offers:

1. The ICC must publish in the Federal Register the finding that the present and future public convenience and necessity permit the proposed abandonment.

2. Prospective offerors of financial assistance, who can be a shipper, a community, a state agency, or anyone having an interest in keeping the rail service, must file and serve their offers to the ICC within 15 days after the publication in the Federal Register.

3. Within 30 days of publication, the ICC must decide whether the offeror is financially responsible and the offer likely to cover (a) the cost of acquisition or (b) the difference between the revenue atributable to the line and the avoidable cost of providing the service on the line, including a reasonable return on the value of the line.

These determinations are extremely important because the carrier must be protected from a timedelaying and therefore costly negotiation period based on a frivolous offer; the shipper and community must also be given an opportunity to maintain the service by not having a genuine legitimate financial offer rejected by the ICC.

If the ICC finds that a financially responsible person has made a reasonable offer, then section 1a(6) of the Interstate Commerce Act requires the ICC to postpone the issuance of a certificate for a reasonable time, not to exceed 6 months, so that the carrier and the offeror can negotiate and execute a binding agreement. The implications of the regulations promulgated to deal with the negotiation period and with the options the ICC has if the negotiations fail proved to be both controversial and important.

The regulations concerning the actual negotiations have several important features. First, the parties are permitted, in fact encouraged, to negotiate an agreement before the issuance by the ICC of a final decision. This makes the 15-day time limit for submitting financial assistance offers more reasonable.

Second, the parties do not have to agree to the final estimated subsidy payment or acquisition price appearing in the carrier's application or in the offer. Unlike the 3R Act, the 4R Act contains no provisions compelling the railroad and offeror of subsidy to enter into an agreement. This omission by Congress may have extremely important consequences on the branch-line problem

Third, during the negotiation period the railroad must continue service over the line and thus suffer the losses during this time period. In the Ex Parte No. 274 (Sub-No. 2) rule-making proceeding, the Association of American Railroads (AAR) argued that this arrangement would induce a potential subsidizer to delay reaching a final agreement. In addition, it would encourage an insincere subsidizer to make an offer just to have the carrier continue service for the additional 6 months.

In promulgating the regulations, the ICC developed four options it could use if the negotiations fail. The first option is simply for the ICC to issue a final certificate. The second and third options apparently will allow the ICC to keep the line in operation, with or without subsidy, for a short period of time. The fourth and most controversial option, which permits the ICC to reopen the underlying abandonment case, has important ramifications.

The basic issue with respect to this fourth option is whether the ICC has the authority to reopen the underlying abandonment proceeding on the basis of the failure of the parties to come to an agreement. The ICC viewed this option as a necessary lever to handle the problem of a recalcitrant carrier refusing a reasonable offer. The ICC defended its regulations in its final report by stating that newly enacted section 17(9)(g) of the Interstate Commerce Act allows the ICC to reopen any proceeding "on grounds of material error, new evidence, or substantially changed circumstances." The ICC views the rejection of a financial offer as clearly a substantially changed circumstance under the terms of section 17(9)(g) of the Interstate Commerce Act, in some situations as a determining factor in influencing the ICC's initial finding in the case.

The ICC's planned use of this fourth option is intimately related to the basic issue of whether or not the ICC can require the parties to enter into an agreement. The ICC can essentially require the railroads to come to an agreement by using or threatening to use this fourth option.

This set of options will undoubtedly increase the carrier's uncertainty about the outcome of the abandonment application, which could inhibit the carrier from putting up lines for abandonment or force the carrier to accept offers that are not fully compensatory. Thus, cross subsidization will remain a part of the branchline policy.

New Accounting Standards and Procedures

Two different rule-making procedures were involved in developing the accounting standards. Section D of the regulations promulgated in Ex Parte No. 274 (Sub-No. 2) contains the national accounting standards and procedures by which the evidence supporting an abandonment application will be accumulated and the financial offers formulated and evaluated. In a separate proceeding, Formal Docket (F.D.) No. 36366 (Branch Line Accounting System) the RSPO promulgated regulations that determine, among other things, the lines on which the carriers must maintain branch-line accounting.

The national accounting standards for determining costs and revenues on the branch lines, as developed in Ex Parte No. 274 (Sub-No. 2), are largely modeled after the standards developed by the RSPO in Ex Parte No. 293 (Sub-No. 2), Standards for Determining Rail Service Continuation Subsidies, which established the standards to be used in the 17-state region for determining the "revenue attributable to the rail properties," the "avoidable costs of providing service," and "a reasonable return of the value," as those terms are used in the 3R Act.

The AAR, among others, believes that the regional and national abandonment standards with respect to accounting should differ more than they actually do. In its brief, the AAR argued that Congress repudiated the accounting standards established by the RSPO under the 3R Act by providing precise and different definitions of the terms "avoidable cost" and "reasonable return" in section 802 of the 4R Act (section 1a of the Interstate Commerce Act). The ICC and RSPO, however, followed the standards and definitions promulgated by the RSPO under the 3R Act, which did not contain definitions of

terms, when promulgating the national abandonment reg-

The economic implication of this issue is that the regulations may produce a subsidy amount that is not compensatory to the railroad. Apparently Congress, having been convinced by an industry witness that the regulations promulgated under the 3R Act produced subsidy amounts that were not compensatory, increased the allowable avoidable costs and reasonable return by putting the precise definitions of the terms in the statute. In its brief the railroads argued that the regulations promulgated under the 4R Act would not be compensatory because deferred maintenance allowances are not adequate, because the carriers will not be allowed to include the cost of equity capital in their calculation of their cost of capital, and because historical cost, instead of current cost, is used to determine the cost of equipment.

This issue of noncompensatory subsidy is directly related to the issue concerning the ICC's power—or lack of it-to require the carrier to enter into a subsidy agreement.

The regulations promulgated in F.D. No. 36366, Branch Line Accounting System (49 CFR 1201), only provide for a reporting and codification of the data derived from the substantive accounting standards developed in Ex Parte No. 293 (Sub-No. 2) (Regional Standards) and Ex Parte No. 274 (Sub-No. 2) (National Standards).

Though not addressing substantive accounting procedures, the regulations promulgated in F.D. No. 36366 will have a substantial impact on shaping the new branchline policy by establishing those branch lines on which the carriers must maintain a system of accounts. This will be accomplished by bringing together many of the different issues and procedures resulting from the various rule makings based on the 4R and 3R Acts and by requiring each carrier to provide annual reports and line-specific information to various parties on all the branch lines for which it must maintain accounts.

In the regulations promulgated in F.D. 36366, the RSPO established the accounting burden of branch lines by requiring the carrier to collect the revenue, cost, and service unit data specified in parts 1121 and 1125 of the Code of Federal Regulations (e.g., the national and regional abandonment standards, respectively) for the following lines: (a) lines designated as falling in categories 1, 2, 3, or 4 in the system diagram map; (b) lines subject to a directed service order under section 304(d)(3) of the 3R Act; and (c) lines subject to a rail continuation service agreement entered into before the designation of the line on the system diagram map.

An important trade-off exists in connection with this accounting requirement. In the F.D. 36366 rule-making proceeding, the Missouri-Kansas-Texas Railroad Company and the AAR argued that it would cost the railroads millions annually to maintain accounts for those lines falling into categories 1 and 2. On the other hand, the RSPO argued that the line-specific information would help both the local communities in preparing for the possible loss of rail service and the state agencies in developing rail plans and in establishing priorities among specific rail group projects.

If in fact the accounting requirement proves to be extremely burdensome to the carriers, two unfortunate effects might result. First, carriers would not put lines in category 2 at all, and, second, carriers would put lines up for abandonment after the minimum time (4 months) in category 1. Thus, the advance-notice benefits of the system diagram map would be reduced. The filings of the initial system diagrams with the ICC indicate that this concern may be overstated. As of July

1977, more than 13 700 km (8500 miles) of line were listed under catetory 1 and more than 7000 lines were listed in category 2.

The regulations in F.D. 36366 state that the accounting methodology set forth in the national standards (49 CFR 1121) is to be applied by the carrier to any branch that has been designated on a system diagram map in categories 1, 2, or 3 and to any branch that is the subject of a rail service continuation agreement entered into pursuant to section 1a(6)(a) of the Interstate Commerce Act. On the other hand, the regional accounting standards (49 CFR 1125) shall be applied to any line that is the subject of a rail service continuation agreement entered into pursuant to section 304 of the 3R Act.

Another important aspect of these regulations is that they require each carrier to publish its branch-line accounting data. First of all, the carriers must file a yearly report with the ICC listing account-by-account totals of the aggregate revenue, cost, and service unit data for all branch lines for which it must maintain accounts. Despite the substantial disaggregation of the data into a number of various accounts, the data in the report will be useful for only a limited number of purposes.

Another requirement, one more helpful to the public and more costly to the carrier, is that the carrier make available for inspection and examination by the ICC and by the designated state agencies in the states in which the relevant lines are located the records, accounts. working papers, and other documents reflecting the revenues, cost, and service unit data of each branch line for which it must maintain data. The regulations in Ex Parte No. 274 (Sub-No. 2) and Ex Parte No. 293 (Sub-No. 2) confer similar privileges of inspection to the subsidizer and prospective subsidizers, but only after the carrier has submitted an abandonment application.

This provision is the only one that allows the designated state agency, which presumably will keep the relevant communities informed of the financial viability of their lines, to monitor the actual condition of the lines that fall into categories 1 and 2. Thus, this provision should serve a vital function by keeping the communities and shippers on the marginal lines abreast of the economic conditions of the line. On the other hand, this requirement of providing specific line data to the ICC and designated state agencies before the line is put up for abandonment, along with the burden of maintaining accounts as noted above, might exacerbate the problem of carriers not putting lines into category 2 and keeping the line in category 1 for only the required minimum time of 4 months.

Not Changing Abandonment Procedures

One of the strongest criticisms of the old abandonment process has been that the criteria by which the petitions are granted or denied is not clearly delineated (1, pp. 168-169). The new procedures do not alleviate this problem. The railroads (and the shippers and communities) will face as much if not more uncertainty of what the outcome of an abandonment case will be as they did in the past

First of all, the controversial, short-lived, 34carload rule was discontinued largely due to the views of the overwhelming majority of parties participating in the Ex Parte No. 274 (Sub-No. 2) rule making. In past cases where the carriers 'passed' the 34-carload rule, they could be fairly certain that the ICC would permit the abandonment. Second, the 4R Act has made the abandonment process a multistep process, permitting discretionary action by the ICC at the various steps, and thereby increasing the uncertainty to the railroads.

For example, the two new opportunities for discretionary action by the ICC involve its decision on whether a financially responsible person has made a reasonable offer and its decision on whether to reopen the underlying abandonment case if and when the negotiations fail; this will greatly increase the uncertainty for the carrier.

As in the past, the criteria used by the ICC in weighing the burden of the railroad against the community's need for the service has not been clearly delineated. More exact accounting practices will increase certainty in the calculation of losses, but this will not necessarily increase the certainty with respect to the most important calculation—whether or not the public convenience and necessity will permit the abandonment. The impact of this uncertainty will be discussed below.

LOCAL RAIL FINANCIAL ASSISTANCE PROVISIONS

Sections 803 and 805 of the 4R Act are the two sections that provide for federal financing of rail service continuation subsidies. Providing federal short-term financial assistance to communities and shippers, however, is not new with the 4R Act. Title 4 of the 3R Act established a system whereby the states in the 17-state region were eligible to receive up to \$180 million in federal assistance for a local rail service program under a two-year program.

Effects on the Regional Subsidy Program

Section 805 of the 4R Act changed the local rail service financial assistance program for the 17-state region, as established by section 402 of the 3R Act, in several important ways. Most of these changes were made to make the subsidy program established earlier for the 17-state region consistent with the recently established national program. As of April 1, 1978, the 17 states in the region have operated under the program developed for the rest of the nation.

First, the federal government's share of the cost increased from 70 percent for each of 2 years to 100 percent in the first year to 90 percent in the second year, thus making the program in the 17-state region consistent with the national subsidy program.

Second, the number of legitimate users for the funds was increased. Under the provisions of the 3R Act, the money could only be used for rail continuation subsidies. The provisions did provide for loans so that lines could be acquired or rehabilitated, but these loans could only be used if the recipient of such a loan was no longer eligible to receive rail continuation subsidies. The 4R Act permits this money to be spent on rail continuation subsidies, for purposes of acquisition of the line, for purposes of rehabilitation, and for purposes of constructing or improving facilities necessary to accommodate traffic previously handled by rail.

Third, the method of allocating funds to the states was modified to make it consistent with the method used for the rest of the United States.

National Program Established

The provisions in section 803 of the 4R Act developed the local rail continuation assistance program for the 31 states outside the region and for all the states after April 1, 1978. The program made some significant changes from the program established for the 17-state region by the 3R Act. First, the financial assistance that the states receive can be used for a larger number of purposes, thus permitting a community or shipper to

take the action most appropriate for its situation.

Second, the federal share of the financial responsibility was increased to 100 percent for the period from July 1, 1976, to June 30, 1977; 90 percent for July 1, 1977, to June 30, 1978; 80 percent for July 1, 1978, to June 30, 1979; and 70 percent for the next 2 years. Furthermore, the states may contribute their portions of the costs by in-kind benefits such as forgiveness of taxes under FRA standards and procedures (49 CFR 267).

Third, the subsidy program was lengthened from 2 to 5 years, and, fourth, the method for allocating the money to the states by the Secretary of Transportation, established by the rules under the 3R Act, was modified.

Procedures for States to Receive Federal Money

Section 803 of the 4R Act established the procedure the states have to follow in order to receive federal funds. Along with section 802 of the 4R Act, this section ties the federal local rail service continuation subsidies to the actual abandonment. The FRA published the final regulations implementing these procedures in January 1978, after being delayed by the Office of Management and Budget. Several of the more important aspects of the statutory provisions and the regulations promulgated by the FRA follow.

Methods of Allocating Funds to States

The 4R Act entitles each state to an amount equal to the total amount authorized and appropriated for such purposes, multiplied by a fraction whose numerator is the trackage in a state eligible for rail service assistance and whose denominator is the trackage in all of the states eligible for rail continuation service assistance. At a minimum, however, each state is entitled to no less than 1 percent of the funds appropriated.

If the funds allocated to this program become scarce, this method of allocating funds may tend to work to the disadvantage of the states in the Midwest and Northeast, which contain those lines in the worst operating condition. A state in the Midwest or Northeast will require more subsidies than a state in the West, given the same amount of eligible trackage.

Conditions for a State to Receive Funds

Each state must establish a state rail plan, which must be approved by the FRA, before it can receive any federal funds. It should be noted that the secretary must make available to the states funds for planning purposes. A total of \$15 million is set aside for planning purposes, with a limit of \$5 million to be allocated for each of 3 fiscal years, the last one ending September of 1978. A state's share of the planning funds will be proportional to its rail continuation subsidy entitlement. In addition, this state rail plan must be administered by a designated state agency, which must be capable of making an equitable distribution of the federal funds.

The FRA's regulations provide detailed requirements for the states to follow in establishing their rail plans. The state rail plan must contain a detailed map of the state's entire rail system and must identify different classes of service. The state rail plan must also indicate how the local and regional governmental bodies, railroads, railroad labor, rail service users, and the public generally participated in the planning process.

Furthermore, each line in the state eligible to receive financial assistance must be analyzed in some detail with respect to its condition, its future viability prospects, the effects of its abandonment on the state,

the costs of using other rail services or other modes, and whether or not the line should receive federal or state assistance.

Conditions for a Line to Receive Federal Funds

First, the ICC must have found that the public convenience and necessity permit the abandonment of the line or that the line is eligible under Title 4 of the 3R Act.

Second, the line must be included in the state rail plan and considered worthy of receiving federal funds by the state officials. Thus, if a community is attempting to maximize the probability of maintaining its rail service, it must first lobby with the state officials to get the line it is served by into the proper category in its state rail plan.

Third, the designated state agency must submit the application for funds for a particular line. As part of this submission, the designated state agency must provide information with respect to the applicant's authority, responsibility, and expertise in local rail service matters and on how the federal subsidy will be used.

EFFECTS OF THE NEW BRANCH-LINE POLICY

Obviously the history of decisions and actions under the new branch-line policy and procedures is insufficient to permit a before-and-after study of the effects of the new branch-line policy. Based on previous studies of abandonments, economic theory, and comments of the parties participating in the various abandonment rule-making proceedings, however, two effects of the new branch-line policy and procedures can be foreseen: first, their effect on the balance of power among the involved groups of participants (an income distribution issue) and, second, their effect on the allocation of resources (an efficiency issue).

Effect on the Balance of Power Among Participants

The rules and procedures established under the new policy suggest a shift in the balance of power among the railroads, the shippers on the branch line that is proposed for abandonment, the other shippers using the railroad, the stockholders of the railroad, and the general tax-paying public.

Railroads

Overall, the railroads did not receive significant benefits as the result of the new branch-line policy. The criteria developed by the ICC do not suggest an increase in the probability that it will permit a particular line to be abandoned. The new procedures might indirectly increase the probability of a line's being abandoned if the new advance-warning provisions and the federal government paying for most of the continuation subsidy for 5 years reduce the number and intensity of the protests from shippers and communities. In addition, the ICC may develop a lower threshold for permitting abandonment, given the increased possibility of lines being retained through subsidy.

On the other hand, the new accounting and reporting requirements may inhibit the railroads from putting lines into category 1 or 2 and thus actually reduce the rate of abandonment. The cost of maintaining accounts and the damage that might be done by divulging individual branch-line data may outweigh the cost of continuing service over an uneconomic line. In addition, even if the

railroads are permitted to abandon a line, the accounting standards set up in Ex Parte No. 274 (Sub-No. 2) may not permit them to receive adequate subsidy. Thus, the railroads may have to continue to cross-subsidize the line, albeit to a lesser degree, even if the service over the line receives an external subsidy.

Rail Users Not Shipping Over Uneconomic Branch Lines

Obviously, if the railroads will not be able to abandon any more uneconomic branch lines than in the past, and if the continuation subsidy proves not to be compensatory on the lines that receive it, the other "captive" shippers using the system must continue to finance the cross-subsidy. If these shippers must cross-subsidize the users on the uneconomic branch line as before, and cross-subsidize the shippers using lines receiving inadequate external subsidies, they will actually be worse off under the new policy, if only slightly.

Stockholders of Railroad

If demand factors are such that the railroad management cannot pay for the uneconomic branch lines by increasing or maintaining excessive rates for the other shippers on the line, then rail earnings will be reduced, ceteris paribus. The return to the stockholder will be reduced, or possibly eliminated, if the burden of maintaining uneconomic branch lines causes bankruptcy of the carrier.

Shippers Using the Line and Affected Communities

The shippers using the rail service and the involved communities appear to have gained the most from the new branch-line policy and procedures. To be more precise, the real winners will probably be the shippers of agricultural products and other bulk commodities who are paying less than costs dictate. Under the new policy, these shippers receive a cross-subsidy if the line is not abandoned and are likely to receive an external subsidy if the line is abandoned.

General Taxpayers

The loser under the new policy appears to have been the general taxpayer, who will finance a large portion of the subsidy. The local rail service assistance program reflects the political realities of railroad abandonment. The amount of subsidy is insignificant compared to other federal expenditures. In addition, the financial impact on the general taxpayers is extremely small compared to the impact on the handful of shippers who would be hurt by abandonment. Furthermore, by making the federal commitment much larger than the local and state commitment, the burden of financing these subsidies would appear to have been shifted to someone else.

Effect on the Allocation of Resources

Most economists agree that external subsidies create less allocative inefficiencies than cross-subsidies. If the nation decides that uneconomic rail service should be continued, then the general taxpayers should finance the subsidy, not the other users (or stockholders) on the line.

As noted above, however, the new abandonment procedures do not indicate that the cross-subsidy will be reduced. If the rate of abandonment of those lines that should be abandoned does not increase, then the magni-

tude of the cross-subsidy will not be reduced. Thus, as the policy has been established, the misallocation of resources caused by the external subsidy will be added to the misallocation of resources caused by the current practice of cross-subsidization. The substitution of external subsidies for cross-subsidies, which would have decreased the misallocation of resources, all other things being equal, was not permitted by the new legislation and regulations.

The external subsidy program itself was established in a way that creates a misallocation of resources. First, the size of the federal commitment is out of proportion to the benefits the nation receives from maintaining branch lines. The use of subsidies, if properly implemented, improves the allocation of resources. In the case of local rail service, however, the external factors are largely local in nature. Therefore, most of the subsidy should be financed by local taxpayers.

Second, if the subsidy program was established to help save the local communities from economic disaster, the approach is inefficient. Past studies indicate that, in the majority of cases, the communities suffer little from the loss of rail service (2). A more productive approach to helping these communities economically would be to make this conditional grant less conditional. The communities should be allowed to invest the money in projects that would produce a larger benefit-cost ratio.

Third, more emphasis should be put on uses of the money other than continuation subsidies, as outlined by section 1a of the Interstate Commerce Act. In many cases, efficiency in allocation would be improved by devoting more money to help shippers make the switch to other modes of transport. Presumably, the rail continuation subsidy provisions provide only transitory help and thus will aid shippers. If these subsidies turn out not to be transitory in nature, however, then the shippers will continue to use a mode that, based on costrevenue considerations, should not be used.

Fourth, as argued by Baumel, Drinka, and Miller (3), the nature of the branch-line subsidy program will not increase the efficiency of the local rail service and, thus, will not help the national constituency. By switching a portion of this aid from these lines to lines that are still able to provide valuable service to the rural and agricultural communities but need rehabilitating, a much larger return on investment of these public funds would be realized.

CONCLUSIONS

Though the full impact of the new branch-line policy will take time to fully reveal itself, two important but tentative conclusions can be reached.

First, unless the new legislation and regulations will have some indirect and unexpected effects on the decision processes of the ICC, the railroads will not be helped by the new policy. The legislation and regulations give incentives to the communities and shippers affected to continue using the uneconomic lines at least in the short run. The railroads, on the other hand, were given no tangible incentives and little encouragement to abandon burdensome branch lines.

The policy developed reflects a "political pareto optimal" solution to the light-density branch-line problem. By moving to the new policy, some were helped (communities, but mainly individual shippers), some were not hurt but not helped (the railroads), and some were hurt by such a small amount as to create no political problem (the general tax-paying public).

Second, Congress incorrectly assumed that the program that was appropriate for the 17-state region under the 3R Act was appropriate for the entire nation. The largely federally financed subsidy program under the 3R Act was undoubtedly a correct approach, given the situation where one particular region was facing massive, widespread abandonments occurring in a short period of time.

Under the 4R Act, however, the ICC will act on abandonment of lines on a case-by-case basis, and thus the impact of an abandonment decision on a large multistate area will be minimal. Therefore, more of the subsidy should have been financed by the state and local governments. Because of this and other characteristics of the rail continuation subsidy program, the new branch-line policy may cause a greater misallocation of resources than the old policy.

REFERENCES

- Improving Railroad Productivity. Task Force on Railroad Productivity, Washington, DC, 1973.
- 2. B. J. Allen and J. F. Due. Railway Abandonments: Effects Upon the Communities Served. Growth and Change, Vol. 8, No. 2, Apr. 1977.
- P. Baumel, T. P. Drinka, and J. J. Miller. Implications of the Local Rail Assistance Section of the Railroad Revitalization and Regulatory Reform Act of 1976. The Logistics and Transportation Review, Vol. 12, No. 5, 1976.

Publication of this paper sponsored by Committee on State Role in Rail Transport.

*This paper was written while Mr. Allen was a Brookings Economic Policy Fellow with the U.S. Department of Transportation.

Class 2 Railroad Operating Costs

C. John Langley, Jr., and Edwin P. Patton, Transportation Center, University of Tennessee, Knoxville

Multiple regression analysis was used to develop predictive equations for the estimation of operating costs associated with the provision of class 2 railroad service. Annual report data for 102 carriers was the basis for the construction of five equations, each of which pertained to estimation of a specific type of operating cost. Categories included were maintenance of way, maintenance of equipment, traffic, transportation, and general. Five

specific predictor variables were included in the analyses: carrier geographic location, ownership, main trackage, traffic volume, and one other depending on the particular type of cost being estimated. In addition, an equation was developed for the prediction of the sum in dollars of the individual costs. All equations appeared to be correctly specified, and each exhibited an acceptable explanatory ability. The research