

RELEASED

RESTRICTED — Not to be released outside the General Accounting Office except on the basis of specific approval by the Office of Congressional Relations.

21521
118142

REPORT BY THE
Comptroller General
OF THE UNITED STATES



**The Federal Approach To Rail Safety
Inspection And Enforcement:
Time For Change**

The Federal Railroad Administration's safety enforcement program mainly involves making individual, routine inspections of track or rail-cars. These inspections often result in identifying defects or recommending enforcement actions. Although the inspections have identified many defects and violations, their narrow focus does not encourage broad-based railroad compliance with safety standards.

The Railroad Administration could more effectively fulfill its enforcement responsibilities if it would reduce the number of individual, routine inspections performed and shift its emphasis to broad-based system assessments, comprehensive evaluations of railroads' entire systems and operations. Through these assessments, the Railroad Administration could determine the overall adequacy of railroads' safety programs and bring the deficiencies to the attention of railroads' top management.



CED-82-51
APRIL 19, 1982

521647 / 118142

Request for copies of GAO reports should be sent to:

U.S. General Accounting Office
Document Handling and Information
Services Facility
P.O. Box 6015
Gaithersburg, Md. 20760

Telephone (202) 275-6241

The first five copies of individual reports are free of charge. Additional copies of bound audit reports are \$3.25 each. Additional copies of unbound report (i.e., letter reports) and most other publications are \$1.00 each. There will be a 25% discount on all orders for 100 or more copies mailed to a single address. Sales orders must be prepaid on a cash, check, or money order basis. Check should be made out to the "Superintendent of Documents".



COMPTROLLER GENERAL OF THE UNITED STATES
WASHINGTON D.C. 20548

B-204770

The Honorable James J. Florio
Chairman, Subcommittee on Commerce,
Transportation, and Tourism
Committee on Energy and Commerce
House of Representatives

The Honorable Dan Glickman
House of Representatives

The Honorable Robert T. Matsui
House of Representatives

In response to your January 12, 1981, request and subsequent discussions with your offices, we have reviewed the Federal Railroad Administration's rail safety program.

This report summarizes the results of our review of the Federal Railroad Administration's program, policies, and practices for improving the Nation's rail safety. It makes several recommendations, including refocusing the safety enforcement program to more efficiently employ the limited Federal and State inspector forces and instituting management controls over the enforcement process to improve the timeliness, efficiency, and effectiveness of civil penalties. As agreed with your office, an assessment of the mandated Systems Safety Plan, the focus of your original request, is the subject of a separate review.

As arranged with the Chairman's office, we do not plan to distribute this report further until hearings are held or you announce its contents. Should hearings be postponed beyond April 6, 1982, however, we will send copies to the agency and other interested parties 30 days after the date of this report.

A handwritten signature in cursive script, reading "Charles A. Bruns".

Comptroller General
of the United States

D I G E S T

The Federal Railroad Administration tries to ensure railroad safety by monitoring railroads' safety efforts. However, the Railroad Administration is not accomplishing this goal. GAO reviewed the Railroad Administration's safety enforcement program at the request of the Chairman, Subcommittee on Commerce, Transportation, and Tourism, House Committee on Energy and Commerce, and Congressmen Dan Glickman and Robert T. Matsui.

The railroads, the Railroad Administration, and State governments each have inspection responsibilities. The Railroad Administration's safety enforcement program mainly involves making individual, routine inspections of track or railcars. These inspections often result in identifying defects and suggesting enforcement actions. Although these individual, routine inspections have identified many defects and violations, the narrow focus of this approach, the Railroad Administration's limited inspection force, and the questionable deterrent value of the Railroad Administration's violations process have not encouraged broad-based railroad compliance with safety standards. In fact, the program's primary effect has been to get individual defects corrected and not to motivate railroads to improve their overall safety programs.

The Railroad Administration could more effectively fulfill its enforcement responsibilities if it would reduce the number of individual, routine inspections performed and shift its emphasis to broad-based system assessments, comprehensive evaluations of railroads' entire systems and operations. Through these assessments, the Railroad Administration could determine the overall adequacy of railroads' safety programs and bring the deficiencies to the attention of the railroads' top management. Top management has had little involvement in the results of the individual, routine inspections.

On the few occasions when the Railroad Administration has used assessments, accidents on the railroads involved decreased significantly.

RAILROAD ADMINISTRATION'S NATIONAL
MONITORING IS LIMITED

One major problem with the Railroad Administration's individual, routine inspection approach is that many inspectors are unable to cover their assigned territories. The Railroad Administration has 221 Federal inspectors augmented by 94 State inspectors. In 1981 they scheduled for inspection over 900,000 units at railroads and shippers and 185,000 miles of track. Nearly one-half the Federal inspectors are generally unable or never able to cover their territories. Some inspectors believed it would take them 3 to 5 years to cover their territories, and others acknowledged that some major facilities and inspection points had not been inspected by Railroad Administration inspectors in years. (See p. 7.)

Factors contributing to the inspectors' inability to cover their territories include:

- Lack of consistency in the size of inspectors' territories.
- Vacant inspector positions.
- Travel fund restrictions.
- Unreliable railroad inspection records.

Railroads are principally responsible for the safety of their operations and the Railroad Administration sees its role as monitoring the railroads' safety activities. Railroads conduct inspection programs designed to find defects before they become serious enough to cause damage or violate Federal regulations. So, although Federal monitoring may be limited, the railroads' inspections may be as frequent as several times a week or even daily. (See pp. 7 and 15.)

GAO does not believe it is reasonable to assume that the Railroad Administration will, or for that matter should, be provided the additional resources, financial and otherwise, to rectify the coverage conditions created by the Railroad Administration's approach to monitoring compliance with Federal safety standards. Instead, as

a first step, the Railroad Administration should reduce its level of emphasis on individual, routine inspections and gradually undertake more comprehensive assessments of railroads' safety programs. (See p. 10.)

VIOLATIONS REPORTING PROCESS IS
NOT AN ADEQUATE DETERRENT AND
NEEDS PROCEDURAL IMPROVEMENTS

Even if the Railroad Administration shifts its emphasis to reviewing safety programs, an effective civil penalty process will still be necessary. Right now the deterrent value of the Railroad Administration's violations process is questionable. One problem is that a violation takes about 20 months to settle. Processing violations in large batches influences the length of time it takes to resolve a case. Also, a primary factor contributing to associated penalties being negotiated down to one-half to two-thirds of the original assessment is the length of time needed to settle a case. (See p. 25.)

The Railroad Administration's violations reporting system does not have adequate controls to assure that all violations are handled properly and that regional personnel are adequately informed of the status and outcome of their violation reports. (See p. 29.)

The fact that violations and defects continue indicates that conducting individual, routine inspections and assessing penalties has not motivated railroads to comply with safety standards. (See p. 8.)

STATE PARTICIPATION PROGRAM
NEEDS IMPROVEMENT

The State participation program is a program whereby the Railroad Administration reimburses State governments for up to 50 percent of the expenses for State railroad inspectors.

Although the State participation program has not grown as quickly as the Railroad Administration had planned, it has had a positive effect on rail safety enforcement, mainly by supplementing the Railroad Administration's inspectors. However, certain aspects of the program need improving and accomplishing such improvements should take priority over program growth.

Aspects of the program in need of improvement follow:

- The Railroad Administration does not consider important factors such as rail traffic density and hazardous materials flow when determining the number of State inspectors for which it will provide reimbursement.
- The Railroad Administration does not adequately consider changes in the number of State inspectors when assigning Federal inspectors.
- Railroad Administration evaluations of the State participation program do not include important factors such as uniformity in enforcement by the various States and program guidance it provides to the States. (See p. 34.)

RECOMMENDATIONS

To more effectively and efficiently use limited railroad safety enforcement resources, GAO, in summary, recommends that the Secretary of Transportation direct the Administrator of the Railroad Administration to:

- Shift emphasis from individual, routine inspections to broader assessments of railroad safety programs. (See p. 23.)
- Improve procedures and controls in the violations reporting process. (See p. 33.)
- Consider the number of State inspectors in a geographic area when assigning or reassigning Railroad Administration inspectors. (See p. 40.)
- Improve the administration and evaluation of the State participation program. (See p. 40.)

AGENCY COMMENTS

The Department of Transportation generally agreed that a redirection of the Railroad Administration's monitoring effort is needed. While the Department stated the reorientation has been underway for approximately a year, GAO has seen only a limited shifting of inspector resources to broad-based system assessments. (See p. 23.)

The Department took exception to GAO's proposal that time goals for processing violations and settling civil penalties were necessary; it indicated such goals would be meaningless. GAO still believes sound management practice and the importance of the civil penalty as an enforcement tool dictate that all cases be expeditiously settled. While the Department agreed to take certain actions on GAO's procedural proposals, these actions do not go far enough. (See p. 31.)

The Department did not address GAO's proposals on the State participation program. Barring termination of the program, the Secretary should adopt GAO's recommendations. (See p. 40.)

C o n t e n t s

		<u>Page</u>
DIGEST		i
CHAPTER		
1	INTRODUCTION	1
	Federal involvement in rail safety	1
	Monitoring approaches to encourage railroad compliance	2
	Enforcement tools	3
	Safety record of the railroads	3
	Objectives, scope, and methodology	4
2	FRA'S MONITORING PROGRAM NEEDS REFOCUSING	7
	FRA's current monitoring approach does not provide satisfactory coverage	7
	GAO has questioned FRA's monitoring approach in the past	8
	Factors contributing toward lack of adequate monitoring coverage	10
	General lack of confidence in inspec- tion approach and penalty process	16
	Broad-based system assessments: a better monitoring approach	18
	Inspections and civil penalties: a program of continuing importance	21
	Conclusions	22
	Recommendations	23
	Agency comments and our evaluation	23
3	THE CIVIL PENALTY: AN INSUFFICIENT TOOL NEEDING GOALS AND CONTROLS	25
	Untimeliness in settling cases diminishes effectiveness of civil penalties	25
	Improved recordkeeping procedures needed to control enforcement process	29
	Conclusions	31
	Agency comments and our evaluation	31
	Recommendations	33
4	STATE PARTICIPATION PROGRAM NEEDS IMPROVE- MENT	34
	Program growth goals not achieved	34
	Method for determining number of State inspectors should be changed	35
	Need for FRA to consider State participation when assigning Federal inspectors	36

CHAPTER		<u>Page</u>
	Need for improved program evaluation	38
	Conclusions	39
	Recommendations	40
	Agency comments and our evaluation	40

APPENDIX

I	Previous GAO reports on rail safety	41
II	FRA and State government locations visited during review	42
III	Letter dated March 10, 1982, from the Department of Transportation	43

ABBREVIATIONS

DOT	Department of Transportation
FRA	Federal Railroad Administration
GAO	General Accounting Office
NTSB	National Transportation Safety Board

CHAPTER 1

INTRODUCTION

On January 12, 1981, the Chairman, Subcommittee on Commerce, Transportation, and Tourism, House Committee on Energy and Commerce, and Congressmen Dan Glickman and Robert T. Matsui asked us to review the Federal Railroad Administration's (FRA's) national rail safety program. It was subsequently agreed with their offices that because the congressionally mandated Systems Safety Plan had not then been issued, our review would be limited to an evaluation of FRA's inspection and enforcement program, including the State participation program.

FEDERAL INVOLVEMENT IN RAIL SAFETY

Railroad safety legislation represents one of the oldest forms of Federal safety regulation. The first railroad safety law, the Safety Appliances Act (45 U.S.C. 1-7), passed in 1893, and several subsequent laws, Hours of Service Act (45 U.S.C. 61-66), Federal Employers' Liability Act (45 U.S.C. 51-60), and the Ash Pan Act (45 U.S.C. 17-21) were designed to protect railroad workers. However, from 1961 to 1968 the number of railroad accidents nearly doubled from 4,149 to 8,028, respectively. The number of accidental deaths also increased. After reviewing the rail accidents one Senate committee concluded 95 percent were caused by such factors as rail defects which were not covered by the existing statutes. To correct this, the Federal Railroad Safety Act of 1970 (45 U.S.C. 421-444), was enacted providing the Secretary of Transportation with the authority to issue regulations in all areas of railroad safety. Authority under the 1970 act has been delegated to FRA, except with regard to grade crossing problems.

The more important safety-related functions FRA is responsible for include (1) issuing regulations containing safety standards for the railroads, (2) investigating and issuing reports concerning collisions, derailments, and other railroad accidents resulting in serious injury to persons or damage to railroad property, (3) administering all railroad safety laws, and (4) managing the program specified in the 1970 act, whereby States would work with FRA to enforce Federal regulations with FRA financing a portion of these activities.

FRA's Office of Safety carries out these safety responsibilities. As of December 31, 1981, the Office had 67 headquarters staff and eight regional offices with 280 Federal staff augmented by 94 State inspectors in 31 States. The headquarters staff develop regulations and programs with the primary goal of improved rail safety. In addition, they furnish general and

technical guidance to regional offices. Regional offices are responsible for enforcing safety standards through inspections.

The 1970 act augmented the Federal inspection force by permitting State inspectors, meeting FRA qualifications, to perform track and freight car safety investigations and surveillance if the State agreed to participate in the cooperative program. Participating States are reimbursed for up to 50 percent of allowed program costs. The reimbursement amounted to more than \$1.3 million for fiscal year 1981. The Federal Railroad Safety Authorization Act of 1980 expanded State inspection program coverage from track and freight cars to include signal and train control, and operating practices of the railroads. However, at the end of 1981, FRA had not issued regulations to implement the 1980 law.

MONITORING APPROACHES TO ENCOURAGE RAILROAD COMPLIANCE

FRA encourages railroad compliance with Federal safety standards by employing three approaches to monitoring the railroads' operations: individual, routine inspections; special task force assessments; and system assessments. The majority of FRA's monitoring has been through individual, routine inspections, with over 900,000 units scheduled for inspection in 1981. This inspection approach focuses on specific components of the train, related equipment, operating practices, and railroad property, including the track and signal systems. Because they generally have to apply a different set of requirements or Federal standards for each component such as track, locomotives, and signal devices, inspectors tend to be highly specialized and perform only one type of inspection. To accomplish an individual, routine inspection, the inspector usually gives advance notice to the railroad of the date and specific site or territory to be inspected. Conditions which do not meet the standards are normally cited as defects, made a matter of record, and brought to the attention of the railroad. Violations are cited when conditions noted are serious or continuing.

Special task force assessments are intensified monitoring efforts in one or more of the various railroad specialty areas (track, signal, etc.) on just a portion of an entire railroad system. These assessments generally involve a few FRA personnel for a matter of days and are planned and implemented entirely by the individual FRA regions. In 1981 FRA's regional offices performed approximately 46 special task force assessments. The results, while not oriented toward generating extensive violations, demonstrated instances of noncompliance with Federal standards. These areas of noncompliance were discussed in oral briefings with the railroads' middle management.

System assessments are comprehensive evaluations of railroads' entire systems and operations. They are planned by FRA headquarters and may entail evaluations in multiple regions. Each assessment encompasses all the railroad specialty areas on selected portions of the railroad's operation. These assessments take extensive time to plan and typically have used 40 or more inspectors to accomplish. From such an assessment FRA can determine the adequacy and effectiveness of the railroad's commitment to rail safety and bring these conclusions and resulting recommendations to the attention of the railroad's top management. FRA made three system assessments during 1979 and 1980 and none in 1981.

ENFORCEMENT TOOLS

FRA has four principal tools to enforce safety legislation and regulations--civil penalties, emergency orders, compliance orders, and injunctions. Civil penalties, which may be assessed for violations of safety laws or regulations, are used most often. Emergency orders, which FRA has issued on 11 occasions, are used to order a facility or piece of equipment out of service because it is in an unsafe condition and could cause an injury or death. Compliance orders are orders by FRA directing compliance with the Federal Railroad Safety Act of 1970, or the rules or orders issued thereunder. Injunctions are court orders enjoining actions in violation of the safety laws or enforcing rules or orders issued under the laws. FRA has never used compliance orders or injunctions.

FRA's violation report and civil penalty process requires the inspector to provide enough information to document the existence of the violation in court and includes review by the regional offices, the Office of Safety, and the Office of the Chief Counsel. The Office of the Chief Counsel is also responsible for providing the railroad or shipper with formal notification of the violation and amount assessed. Although the railroad or shipper has the option to pay the full amount assessed or take the case to court, most cases are settled through an informal administrative meeting between FRA and the railroad or shipper. Defenses or mitigating factors are considered and a compromise is negotiated.

SAFETY RECORD OF THE RAILROADS

Railroads, in comparison with other transportation modes, have a good safety record. The following chart shows National

Transportation Safety Board (NTSB) ^{1/} statistics on transportation fatalities from 1973 to 1980.

	<u>1973</u>	<u>1975</u>	<u>1977</u>	<u>1979</u>	<u>1980</u> (note a)
Railroad (note b)	777	564	644	608	667
Highway	54,615	44,690	47,876	51,093	51,676
Grade crossings	1,185	910	1,001	883	833
Marine	2,074	1,860	1,528	1,590	1,555
Aviation					
General	1,412	1,324	1,395	1,382	1,375
Air carrier	227	124	654	355	14
Pipeline	<u>70</u>	<u>30</u>	<u>43</u>	<u>42</u>	<u>21</u>
Total	<u>60,360</u>	<u>49,502</u>	<u>53,141</u>	<u>55,953</u>	<u>56,141</u>

a/Based on preliminary statistics released on May 10, 1981.

b/Figures include rapid rail transit.

While fatalities from rail accidents may not be excessively high, these accidents are expensive. A train accident occurs about once an hour in the United States. The cost of the resulting damage is approximately \$800,000 a day. See appendix I for a list of other reports we have done on FRA rail safety programs.

OBJECTIVES, SCOPE, AND METHODOLOGY

The objectives of this review were to determine (1) the effectiveness of FRA's current inspection and enforcement approach, (2) the efficiency of the violation-civil penalty process, and (3) the effectiveness of the State participation program.

To assess FRA performance in achieving increased compliance with Federal rail safety standards, we interviewed:

--Labor representatives at the Railway Labor Executives Association.

--Industry representatives at the Association of American Railroads.

^{1/}NTSB is an independent Federal agency that investigates transportation accidents and determines their probable cause.

--Representatives of the National Association of Regulatory Utility Commissioners.

--Officials of six railroads: Burlington Northern, Chessie System, Illinois Central Gulf Railroad Company, Missouri-Kansas-Texas Railroad Company, Soo Line Railroad Company, and Southern Pacific Transportation Company.

--State safety officials in Illinois, Louisiana, Maryland, Michigan, Minnesota, Oklahoma, and Pennsylvania.

--FRA personnel including 76 regional staff in 4 regions and 24 staff in the Washington headquarters.

We reviewed FRA's operations and practices relating to the processing of violations and the assessing of civil penalties. We examined over 9,500 violations submitted by the four FRA regional offices (Chicago, Illinois; Fort Worth, Texas; Philadelphia, Pennsylvania; and Portland, Oregon) in the period January 1, 1979 through June 30, 1981, to determine whether feedback to assist in doing their job better and in dealing with the railroads was provided to the regional offices. We selected a stratified sample consisting of 275 violations settled in 1981 to obtain an estimate of time required to process violations, at the 95-percent confidence level, that would be within +8 percent of the actual time involved in each phase of the FRA violation review and settlement process.

To determine the functioning and effectiveness of the State participation program, we interviewed six officials including the Associate Administrator for Safety and his staff who routinely deal with the program at FRA headquarters, five FRA regional directors, representatives of seven State governments, and the Chairman of the Subcommittee on Rail Safety and an assistant general counsel of the National Association of Regulatory Utility Commissioners.

Our general review approach was to identify safety program guidance, practices, and procedures prescribed by the Washington headquarters through a review of the laws, regulations, and records, and through discussions with the cognizant FRA officials. We tested the extent of regional understanding of the safety program, its requirements, and achievements by interviewing FRA officials in four of FRA's eight regional offices. Overall, we believe the rail operations in the four FRA regions we reviewed are an accurate representation of the Nation's rail system and, therefore, offered the range of environments under which FRA and its field force and State inspectors operate. These regions demonstrate urban and rural operations by large and small and prosperous and marginal railroads. We analyzed violations identified by the inspectors, the timeliness of their processing, and administrative controls over this entire activity.

We visited the six railroads and seven States mentioned to obtain their views on Federal safety program laws and regulations and the effectiveness of Federal enforcement activities. We selected the railroads and States as representative of those which must deal with FRA.

To place the rail safety program into perspective, we gathered statistical data relating to: the trend of transportation fatalities, FRA's staffing and annual appropriations, FRA inspections scheduled in 1981, defects and violations identified in each specialty area, and violation cases closed.

We conducted our review from May through December 1981. It was performed in accordance with GAO's current "Standards For Audit of Governmental Organizations, Programs, Activities, and Functions." The information was gathered at FRA headquarters in Washington, D.C., and at four FRA regional offices.

CHAPTER 2

FRA's MONITORING PROGRAM

NEEDS REFOCUSING

FRA's principal method of monitoring railroad safety is through individual, routine inspections. This approach has encouraged railroads to correct specific defects, but has not motivated railroads to improve their overall safety programs. Also, this approach has not achieved uniform coverage nationwide, has not brought safety program deficiencies effectively to the attention of the railroads' top management, and cannot be used to arrive at an overall conclusion on the adequacy of an entire railroad's safety program.

An evolutionary shift of FRA's efforts into more integrated, multidisciplinary, broad-based system assessments offers the opportunity for broader railroad coverage and increased compliance with Federal safety requirements and standards. These broad-based assessments, whether systemwide or oriented to major segments of railroads' operations, in the few occasions when used, have obtained the attention of and improved communications with the railroads' top management and achieved corrective actions through dialogue without levying civil penalties.

FRA's CURRENT MONITORING APPROACH DOES NOT PROVIDE SATISFACTORY COVERAGE

FRA's small force of 221 inspectors and 59 regional management personnel are expected to monitor over hundreds of railroads, 300,000 miles of track, and over 1.7 million freight cars. FRA's policy is that the railroad industry has the primary responsibility for assuring railroad safety with FRA inspectors monitoring the railroads' efforts. The monitoring approach is accomplished primarily through a program of individual, routine inspections. In 1981, this involved inspecting over 900,000 units. However, nearly one-half of the regional management and inspection personnel we interviewed indicated inspectors were unable to adequately cover their assigned territories.

Individual, routine inspections: an inefficient way to monitor the railroads

FRA's primary means of monitoring industry compliance with Federal safety standards is a regular program of routine inspections. Specific sections of track as well as individual freight cars, locomotives, and other equipment and facilities are inspected for compliance with Federal standards. Conditions which do

not meet those standards are normally cited as defects, made a matter of record, and brought to the railroad's attention. Violations are cited when conditions noted are serious, but violations are infrequent when compared to the number of defects recorded. For track and signal defects, it is FRA's policy to reinspect the exact same location at a later date to determine if the defect is corrected. If the defect has not been corrected, a violation may be filed.

These individual, routine inspections are a time-consuming and ineffective way to monitor industry compliance with Federal rail safety standards. By inspecting specific track and equipment routinely, an FRA inspector devotes a lot of time on a small portion of a railroad's operation. FRA can compel a railroad to bring its track into compliance with Federal standards, but only those several miles the inspector personally viewed--not the hundreds or thousands of miles a railroad might operate. Inspectors can order defective trains out of service, but they do not observe all the trains used daily. Thus, while FRA's monitoring approach results in the correction of specific individual defects, it does not address the overall condition of railroads' operations and, therefore, has not motivated railroads to improve their overall safety programs. Also, since defects continue to abound, over 210,000 in 1980 alone, the individual inspection program and civil penalty process appear only marginally effective in that they encourage the railroads to divert the resources to correct those cited defects without changing their overall systemwide safety commitment.

GAO HAS QUESTIONED FRA'S MONITORING APPROACH IN THE PAST

As far back as 1975 1/, we recommended that monitoring should be carried out in a manner which will permit FRA inspectors to determine systematically whether (1) the railroads' inspections are made as required, (2) all safety defects found by the railroads' inspectors are reported to management, and (3) repairs or other needed corrective actions are taken by the railroads.

FRA, in responding to our 1975 report, stated it would improve its overall monitoring of railroads' safety programs. Specifically, the new program would (1) establish priorities for FRA monitoring efforts, (2) take a multidisciplinary team approach and provide assistance to those railroads with the poorest safety records in improving their safety programs, and (3) reassign FRA's limited field personnel more equitably.

1/Letter to the Secretary of Transportation, April 11, 1975, RED-75-348 (B-164497(5)).

We acknowledged that the 1975 proposed program showed potential for greatly improving the effectiveness of FRA's safety inspection activities; however, although some changes have been made in recent years, this potential has not been realized. FRA, for the first time, in 1981 prepared an annual National Inspection Plan; however, the plan did not focus on multidisciplinary assessments and did not clearly prioritize FRA's monitoring efforts. Further, the plan lacks a reassessment of the equity of workloads assigned to the inspectors.

In our March 1978 report on commuter railroad safety 1/, we observed that FRA inspections were similar to those being conducted by the railroad and were ineffective because of limited territorial coverage, limited inspection followup, railroad failure to correct all reported deficiencies, and railroad failure to keep required records of inspections. Many of these conditions continue to prevail today and apply both to commuter and freight railroads.

Over 90 percent of the FRA inspectors used to be employed by railroads, and they continue to function much like railroad inspectors. They walk track, inspect signals, and observe operations. We found none employing management analysis or statistical techniques to evaluate railroad operations or support an overall conclusion on the adequacy of a railroad's safety program. In the absence of such advanced techniques, FRA inspector performance, while highly respected on technical merits by the industry and labor, is little different than that of railroad inspectors.

FRA's inspection force questions adequacy of inspection coverage

FRA's inspectors using the individual, routine inspection approach are having trouble covering their territories. While 60 percent of the inspectors we interviewed indicated they could cover their assigned territories (some in less than a year), 44 percent of the 62 regional management and inspection personnel with whom we discussed this subject indicated they were unable or generally unable to adequately cover their territories. Only 6 percent of those interviewed indicated they were always able to cover their territories.

The following table, which is based on interviews with inspectors and FRA regional management, depicts the extent of the problem and the variance that exists in different parts of the country.

1/"Commuter Railroad Safety Activities On Conrail's Lines In New York Should Be Improved" (CED-78-80, March 15, 1978).

Inspectors' ability to cover territory	FRA regional offices				Total	
	Chicago	Fort Worth	Philadelphia	Portland	Actual	Percent
Always able	2	0	1	1	4	6
Generally able	16	6	4	5	31	50
Generally unable	1	13	0	2	16	26
Never able	<u>2</u>	<u>7</u>	<u>1</u>	<u>1</u>	<u>11</u>	<u>18</u>
Total	<u>21</u>	<u>26</u>	<u>6</u>	<u>9</u>	<u>62</u>	<u>100</u>

Inspectors in the more urban areas, such as eastern Pennsylvania and northern Illinois, where rail activity is more heavily concentrated or in relatively smaller geographic areas, seem better able to provide regular surveillance. Those inspectors in less densely populated regions, such as Texas, are not able to provide as much coverage.

Some field personnel told us of facilities that they had not seen in years or had not seen at all. The primary signal official in FRA headquarters stated that any signal inspector with more than 4,000 miles of territory cannot adequately cover it. Eight of FRA's 23 signal inspectors have territories larger than 4,000 miles.

It is questionable whether some inspectors who indicated they were generally able to cover their territories can actually do so without assistance or in a timely manner. Inspectors in FRA's Portland regional office were only able to cover their territories with assistance from other FRA regional offices. Some inspectors in other FRA regional offices we visited, although indicating they could cover their territories, admitted it would take 3 to 5 years and in one case 10 years to do so. The coverage these inspectors were able to provide is certainly inconsistent with coverage provided by other FRA inspectors of the same specialty area and did not seem to be sufficiently frequent or timely.

FACTORS CONTRIBUTING TOWARD LACK OF ADEQUATE MONITORING COVERAGE

Aside from the extensive scope of FRA's responsibilities and the inherent coverage drawbacks of its individual, routine monitoring approach, other factors hamper or exacerbate the ability of inspectors to provide adequate national monitoring coverage.

These factors are:

- Lack of consistency and uniformity in the size of inspector territories.
- Vacant inspector positions.
- Travel fund restrictions.
- Lack of reliable railroad inspection records.

Inspector territories
are inconsistent

FRA regional offices divide each region into territories by inspector specialty areas (track, signal, etc.), and inspectors are assigned a territory. Some inspector territories are small and compact and can be covered completely in a few months. Other territories are large and unwieldy and would take years to adequately inspect. One east coast track inspector, for example, is responsible for 1,500 miles of track and can cover his territory in 4 months, whereas another track inspector in the southwest covers 4,500 miles, requiring 2 to 3 years to adequately inspect. Some inspectors travel only 100 miles or so to reach all points in their territories; others have boundaries extending over 700 miles. This disparity results from the fact that the (1) field inspection force was put in place by an informal process when little information was available on which to base an effective deployment plan, (2) placement of the inspection force has not changed much in 10 years, and (3) FRA has never comprehensively reassessed the deployment of its inspection force.

FRA did not develop a formal deployment plan based on sound, statistical information when the field inspection force was put in place in the late 1960's and still does not have a formal plan. The Chief of FRA's Program Guidance and Enforcement Division, a member of the original task force to determine the size of the field organization, described the process as informal and unsophisticated. The existing staff of Interstate Commerce Commission safety inspectors who were transferred into FRA in 1967 as signal, equipment, and operating practices inspectors basically were left where they were at the time of transfer. Much of the information needed to equitably and effectively place FRA inspectors was simply not available at that time. Even in 1972 there was no national inventory of railroad signal systems, and thus little basis existed on which to allocate signal inspectors. As a result, there is today, for example, one signal inspector covering over 6,500 miles of territory while another covers approximately 1,900 miles.

Our November 1980 report 1/ points out another example of deployment problems in that FRA does not have a complete inventory of hazardous materials shippers or shipping points. Though FRA headquarters officials indicated they generally know the locations of major shippers and shipping points, hazardous materials inspectors confirmed during our review that they do not know how many shipping points there are in their territories. Thus, there is no formal, demonstrated basis for deploying hazardous materials inspectors.

Office of Safety officials conceded that the allocation of the inspector force by regional office and specialty area has remained essentially unchanged since the field organization was established. As early as 1975, internal FRA reports pointed out the need for a more equitable distribution of responsibilities. FRA has never comprehensively reassessed the deployment of its field organization to remove the disparity between its inspector territories and to ensure that it is effectively utilizing its scarce inspector resources. Resource allocation reacts to, rather than anticipates, vacancies and retirements. Some re-allocations have occurred but the process does not appear designed to more effectively and equitably allocate inspector resources.

The need to reassess the current field organization is further accentuated by the many changes since the field organization was established. In 1972, only FRA enforced Federal railroad safety laws. However, at the end of fiscal year 1981, 31 States with 94 track and equipment inspectors were assisting in the national rail safety enforcement effort. Changes in State participation have not been adequately considered when assigning FRA inspectors. This is discussed further in chapter 4 of this report.

Fewer inspectors to do the job

Inspector position vacancies are sometimes not filled or are not filled in a timely manner. FRA had 221 inspectors at the end of fiscal year 1981, 8 percent less than the fiscal year 1979 end-of-year force of 240. The Federal Railroad Safety Authorization Act of 1980 (Public Law 96-423) authorizes FRA to have a maximum of 645 safety inspectors and 125 clerical personnel in its Office of Safety. The House Committee on Appropriations, in its report on FRA's fiscal year 1981 appropriations, recommended that FRA fill 339 inspector positions for this activity.

1/"Programs For Ensuring The Safe Transportation Of Hazardous Materials Need Improvement" (CED-81-5, November 4, 1980).

The following table shows the number of positions authorized in the appropriations and the filled regional office positions for fiscal years 1979 to 1981.

Fiscal year	Total field authorization	Number of positions filled at end of fiscal year			
		Inspectors	District chiefs/specialists	Regional directors	Total
1979	343	240	47	8	295
1980	353	231	46	8	285
1981	328	221	51	8	280

The Director, Office of Planning and Analysis, advised us that FRA has not filled positions up to the congressionally authorized limits because of Office of Management and Budget personnel ceilings, executive branch hiring freezes that were imposed during the last two administrations, and problems in recruiting qualified inspector personnel.

FRA has managed attrition among its inspector force by:

- Assigning the territory of the departing inspector to one or two other inspectors.
- Terminating regular inspection coverage in the territory without an inspector and sending inspectors in only to investigate accidents or complaints.

This has resulted in inadequate coverage of some territories and highly limited coverage in other territories. In addition, these actions have exacerbated inequities in inspector territories. For example:

- An inspector assigned to the Philadelphia regional office working in Ohio had his territory expanded when an inspector from an adjacent territory was promoted to district chief. In addition to being responsible for providing regular coverage in both territories, he was expected to investigate accidents and complaints in two additional territories which were recently vacated. According to this inspector, he was providing no coverage in these territories, which cover the southern two-thirds of the State. The Director of the region stated that because of the assistance of an inspector with the same specialty in an adjoining territory in the Chicago regional office, that portion of Ohio was being adequately covered. However, the responsible specialist in the Chicago region stated that because of external demands placed on his inspectors, enforcement activity in his specialty area was inadequate.

--Because a track inspector position in the Boston regional office had remained vacant for 2-1/2 years, there had been only limited track inspection coverage on a 156-mile portion of Amtrak's Northeast Corridor for over 2 years. Supervisory personnel and inspectors from other territories performed some inspections. According to that region's 1981 annual plan, adequate coverage was impaired by the vacancy.

--A short time ago there were two locomotive and equipment inspectors in Minneapolis, Minnesota, and two in Indianapolis, Indiana. As of December 1981, there were none in either city. As a result, major railroad terminals were not receiving any routine FRA inspection attention. Supervisors in FRA's Chicago regional office and inspectors from adjacent regions occasionally inspected facilities in the urban areas. One supervisor called it "making an appearance." Further, these vacant inspector territories encompassed more than just the immediate cities. The Minneapolis territory also contained significant portions of three midwestern States with heavy concentrations of rail traffic.

Essential inspector travel
has been sharply curtailed

Even the smaller FRA inspector territories encompass hundreds of miles. To adequately cover these territories, inspectors must spend several days a month on overnight travel. Travel fund ceilings since fiscal year 1979 have restrained the amount of travel funds available to inspectors, as the following table demonstrates:

<u>Fiscal year</u>	<u>Travel funds obligated</u>
	(000 omitted)
1979	\$1,334
1980	1,491
1981	1,452

Dramatic increases in the cost of transportation and subsistence have accompanied the restrictions on travel funds. As a result, inspectors are spending far less time on overnight travel than they were 2 years ago. In one region we visited, inspectors spent an average of 65 days on per diem in fiscal year 1979. This average dropped to 57 days in fiscal year

1980 and to 43 days in fiscal year 1981--a 34-percent reduction in just 2 years. As a result, many inspectors could not routinely cover all points in their territories. The situation was most serious in the west and southwest where inspector territories comprised several hundred miles, but it even affected the most manageably sized territories. Several inspectors in FRA's Chicago and Fort Worth regional offices told us that travel restrictions had limited coverage to the areas around their official duty stations, causing them to neglect the outlying points in their territories.

As mentioned earlier, reinspection to insure that previously cited defects have been corrected is an essential part of routine inspection. Yet many inspectors could not conduct proper reinspections because of travel fund limitations.

FRA believes routine inspection
is needed because railroad
inspection records are unreliable

One of the major reasons FRA places such emphasis on individual, routine inspections is the unreliability of railroad inspection records. The railroad industry, according to FRA, has the primary responsibility for railroad safety. FRA monitors their efforts. To insure that the railroads fulfill their responsibilities, FRA prescribes periodic test and inspection requirements. Most types of track, for example, must be inspected twice a week. Railroads are to indicate on the inspection records all conditions which do not meet the Federal safety standards and the actions taken to correct those conditions. These records are to be kept for one year and made available on request for FRA's review.

Railroad inspection records, particularly track records, do not accurately reflect defective conditions. We were informed of this situation by seven of FRA's eight regional directors, as well as 27 regional office technical specialists and inspectors and cognizant headquarters enforcement officials. One regional director informed us of one instance where the railroad's records indicated no defects existed and FRA found 6,000 defects. A track inspector in another region showed us a report of his inspections along segments of a 26-mile section of branch line track in which 107 defects were identified. The railroad's inspection report prepared prior to his inspections noted no defects. FRA personnel offered several reasons for records not being reliable.

--The railroads do not want to be held liable. If the railroad records a defect, fails to immediately repair it, and the defective condition causes or contributes to an accident, the railroad is placed in a legally vulnerable position if the records are used in legal proceedings.

- Railroads desire to avoid penalties for not complying with Federal standards. FRA will not normally file a violation unless it can demonstrate the railroad had prior knowledge of the defective condition. This means FRA usually must conduct an inspection to find the defect, inform the railroad, then reinspect to cite that same defect as a violation. In theory, if the railroad's inspection record was accurate, FRA could use it as proof of prior knowledge and cite a violation during the inspection.
- Railroads do not record what they do not plan to fix. Railroads have a scheduled plan of regular maintenance and are unlikely to deviate from that plan. If a railroad records a defective condition but does not correct it, it risks FRA penalties. Inspectors for the railroads are likely, therefore, to cite only those conditions where maintenance and repair are planned for the near future.

Potential FRA sanctions against railroads for incomplete or inaccurate records are ineffective. For example, although the track standards provide for penalties ranging from \$250 to \$2,500, they have rarely been applied. FRA would have to prove that (1) the defect existed when the railroad inspected the track, (2) the railroad inspector should have observed this condition, and (3) the inspector failed to report it. Officials in the Offices of Safety and Chief Counsel told us that Federal inspectors are not encouraged to file records violations.

FRA's 1981 National Inspection Plan lists records inspections as one of the five ways FRA monitors railroad compliance with the standards. FRA's Track Enforcement Manual, for example, instructs inspectors to examine railroad inspection records and to use them as one basis for scheduling routine inspections. Despite this, seven of FRA's eight regional directors, and many inspectors in the track and other specialty areas indicated that railroad records cannot be relied on to accurately portray the conditions of a property and cannot be effectively used as an inspection resource or as a basis on which to focus compliance efforts. As a result, FRA has used individual, routine inspections as its primary means of determining defective conditions. This has exacerbated the already difficult job of providing nationwide coverage of all facets of railroad operations and does not most effectively use FRA's limited field resources.

GENERAL LACK OF CONFIDENCE
IN INSPECTION APPROACH AND
PENALTY PROCESS

FRA's limited force of inspectors focus their attention primarily on hundreds of thousands of individual, routine inspections. Over 210,000 defects were cited and more than 22,000

violations settled in 1980. However, some FRA officials, the industry association, and others lack confidence in this approach.

FRA staff lack confidence in approach

FRA officials both in headquarters and the regional offices have questioned the effectiveness of FRA's inspection and civil penalty process. The current FRA Administrator has said "Carriers often look at fines as a cost of doing business and there is little emphasis on correcting the problems." A senior Office of Safety management official told us that inspectors should be looking at systems as opposed to counting defects, and another program official questioned the deterrent value of the violation process. Finally, 31 percent of the regional office staff in the four regions we visited believed that the deterrent value of the violation process was "too little, too late." One regional specialist pointed out that more communications with railroad top management was needed and another specialist indicated some railroads did not hold anyone responsible for violations identified by FRA inspectors.

Those outside FRA conclude effectiveness of approach is questionable

In 1981, the Association of American Railroads commented on FRA's proposal to expand State participation in the enforcement program. The association noted:

"Railroads can achieve a better safety record and eliminate accidents and injuries more quickly through the implementation of systematic programs. Diverting employees, equipment, and money to respond to the all too often subjective inspections of various enforcement officials is not productive from an overall safety standpoint."

The statement indicates that railroads divert resources in responding to defects identified by enforcement officials, an unproductive diversion according to the association. One railroad commented that without assessing the overall adequacy of railroads' programs, FRA inspectors may in fact be misdirecting the application of the railroads' limited maintenance resources to the detriment of the overall safety effort.

A 1978 Office of Technology Assessment evaluation ^{1/} concluded that "the inspection programs * * * have had no effect on the accident rate, * * * current inspection programs and

^{1/}Office of Technology Assessment, "An Evaluation of Railroad Safety," May 8, 1978.

strategies have not effectively dealt with the safety problems they are perceived to address." The report further found that FRA's assigning of a significant portion of its safety resources to the inspection program may be ineffective since increased or continuing accident rates coexist with increased inspection effort.

BROAD-BASED SYSTEM ASSESSMENTS:
A BETTER MONITORING APPROACH

FRA's performing thousands of individual, routine inspections to assess the adequacy of railroads' commitment to rail safety and to enforce Federal rail safety requirements is not an effective way to achieve compliance. It does not provide comprehensive evaluations of the adequacy of railroads' entire safety programs and does not obtain sufficient attention from railroads' top management. FRA has performed comprehensive system assessments that focused broadly on the overall safety programs of three railroads. It has made over 40 other, more limited assessments of specific phases of certain railroads' operations. FRA needs to make more use of these broad-based system assessments. Also, FRA should use information in addition to accident and injury records in targeting railroads for such reviews.

Comprehensive monitoring
of railroads is needed

FRA's current inspection program is of limited use in determining the adequacy of railroads' overall safety programs. While FRA's program can be used to gather intelligence and test the accuracy and completeness of the railroads' reporting system, it does not fulfill the requirements of a comprehensive monitoring program. Because the inspections are not performed according to a statistically valid sampling plan which integrates a review of the railroads' maintenance plans, training programs, and acquisition activities, the results cannot support an overall conclusion on the adequacy of the railroads' safety programs. Furthermore, FRA lacks the reporting process under its current approach to obtain the attention of railroads' top management.

To convince railroad top management that its safety program is not adequate and encourage the railroad to bring its operations into compliance with FRA standards, FRA needs to make more use of preplanned, comprehensive, integrated assessments, or broad-based system assessments, and effectively present the results of those assessments. By increasing its commitment to such broad safety assessments and using information in addition to railroads' accident and injury reports, FRA can attain a better overall view of the adequacy of the railroads' programs, present a convincing case to railroads' top management, affect

the railroads' safety programs, and reduce the railroads' accident level.

FRA has conducted a limited number
of broad-based system assessments

FRA has planned and successfully performed three comprehensive system assessments. Other, more limited assessments of specific aspects of railroads' operations have also been conducted with 46 such assessments being performed between January and October 1981. The majority of these assessments have generated positive responses from the railroads.

The three comprehensive system assessments, which were completed in 1979 and 1980, were planned, coordinated, and supervised by FRA headquarters. They encompassed all the operations of the three railroads. FRA subsequently studied the three railroads and found the number of accidents had been reduced 45, 44, and 5 percent on those railroads. (The railroad which experienced only a 5-percent improvement was in bankruptcy and did not have the funds to correct FRA-identified problems.)

One assessment involved FRA headquarters personnel, and over 46 Atlanta, Chicago, Fort Worth, and Kansas City regional office staff over a 3-month period. The assessment included individual, routine inspections of typical sections of track and maintenance operations, as well as a review of railroad inspection records on approximately 45 percent of the track. The assessment evaluated the adequacy and effectiveness of the railroad's scheduled track inspection and maintenance programs. FRA inspectors also estimated for each segment of track the amount of work and materials necessary to bring it into compliance with the applicable standards.

Another of the three comprehensive assessments involved FRA headquarters and five of the eight FRA regional offices. An evaluation of the railroad's equipment, real property, staff, and training program was performed in about 3 months. The assessment covered over one-half of the railroad's main track within each of its divisions. More than 40 inspectors and specialists evaluated the track, signal devices, locomotives, and other equipment as well as the adequacy of the railroad's maintenance facilities, supplies, and personnel.

FRA headquarters has also encouraged regional office use of assessments, referred to as special task force assessments, which are much more limited in scope than system assessments. However, it has not provided guidelines or goals on the proportion of regional monitoring resources that should be committed to such reviews. As a result, some regions had performed few or no assessments.

Special Task Force Assessments
January-October 1981

<u>FRA region</u>	<u>Number of assessments</u>
Atlanta	5
Boston	5
Chicago	8
Fort Worth	12
Kansas City	6
Philadelphia	9
Portland	1
San Francisco	<u>0</u>
Total	<u>46</u>

Though it is too soon to evaluate the effectiveness of these assessments, there were indications that the railroads were initiating positive actions in response to over one-half of these 46 limited assessments.

Inspectors we interviewed who had not participated in railroad safety assessments were apprehensive about them. However, the majority of inspectors interviewed who had participated in assessments found them beneficial because, for instance, FRA had the opportunity to present the results to railroads' top management, railroads dismissed personnel at fault, and such assessments better evaluated training.

While FRA's Systems Safety Plan discusses the positive impact of the major system assessments and the 1981 National Inspection Plan encourages assessments, an FRA senior enforcement official acknowledged that only one major system assessment is planned for 1982. Based on the interviews with regional management officials and inspectors, we believe in the absence of (1) expanded criteria for prioritizing and scheduling assessments and (2) a requirement that all regions commit a specified minimum level of effort to such assessments, some regions will not participate adequately in this beneficial monitoring approach.

Recognizing that assessments, used in determining the adequacy of overall railroad safety programs, may not lend themselves to individual civil penalties, FRA needs to expand the use of other enforcement tools and undertake more dialogue with railroad top management. Compliance orders requiring railroads to improve deficient conditions in their programs appear to offer the potential for improving compliance without relying on heavy fines. In limited instances, where conditions warrant, emergency orders stopping operations may be necessary.

FRA needs to anticipate safety
problems in scheduling broad-
based system assessments

FRA principally relies on high accident and injury levels to help identify railroads for safety assessments. Over 90 percent of the assessments FRA conducted were triggered by high accident or injury rates on a railroad or a particular division within the railroad. However, accident prevention could be improved if such reviews, instead of waiting for the high accident levels, considered additional factors. Factors, including above average defect ratios, defects not being corrected, excessive numbers of complaints, and general maintenance information obtained through inspectors' first hand knowledge, are considered in planning individual, routine inspections and should be among criteria used in prioritizing and scheduling system assessments.

INSPECTIONS AND CIVIL PENALTIES:
A PROGRAM OF CONTINUING IMPORTANCE

Even if FRA's monitoring program evolves and begins placing increased reliance on broad-based system assessments, the individual, routine inspection program will continue to be necessary. For instance, routine inspections would be important in

- handling cases where railroads do not warrant assessments,
- investigating accidents,
- gathering information to prioritize assessments,
- responding to complaints,
- monitoring corrective actions resulting from assessments,
- appropriately utilizing State inspector skills,
- developing violations against noncomplying railroads, and
- investigating shippers of hazardous materials.

In addition, civil penalties would still be necessary as an enforcement tool:

- In cases where railroads do not warrant system assessments yet violations have been identified in the routine inspection process.

--To provide additional support for a compliance order or an injunction.

--To obtain compliance from shippers of hazardous materials.

CONCLUSIONS

FRA's primary means of monitoring industry compliance with Federal safety standards is a regular program of individual, routine inspections. These individual, routine inspections are a time-consuming and ineffective way to monitor railroad safety compliance. FRA's individual, routine inspection approach results in many inspectors being generally unable to adequately cover their territories. However, other inspectors have compact and manageable territories they can cover in just a few months time. This disparity in territories exists because FRA's process for deploying its field force a decade ago was informal and unsophisticated. Since then, that deployment has remained relatively constant and has not been comprehensively reassessed, despite a multitude of changing conditions.

We do not believe it is reasonable to assume that FRA will, or for that matter should, be provided the additional resources, financial and otherwise, to rectify the coverage conditions created by FRA's approach to monitoring compliance with Federal safety standards. Instead, we believe, as a first step, FRA should reduce its level of emphasis on individual, routine inspections and gradually undertake more comprehensive broad-based system assessments of railroads' safety programs.

Shifting the emphasis of the monitoring program from individual, routine inspections to an increased number of broad-based system assessments would enable FRA to make more efficient use of its limited inspector resources, attain a systematic evaluation of selected railroads' commitments to their safety programs, obtain the attention of railroads' top management, and encourage compliance with a limited use of penalties. FRA's current limited use of system assessments has instituted positive dialogue with railroads' top management and convinced them to initiate needed actions. When dialogue with railroad top management fails to attain improved compliance, FRA should not hesitate to employ its full array of enforcement tools. Civil penalties could be used or tools other than civil penalties may be appropriate under such circumstances.

Monitoring through a reduced level of individual, routine inspections, records reviews, observations, violations, and civil penalties will continue to be necessary to gather information, verify actions on assessments' recommendations, investigate accidents, and act on complaints in a timely manner.

RECOMMENDATIONS

We recommend that the Secretary of Transportation require the Administrator, FRA, to:

- Decrease emphasis on individual, routine inspections and allocate a larger proportion of inspector resources to system assessments.
- Select railroads for broad-based system assessments based on factors beyond accidents and injury data. These would include information such as high defect ratios, defects not being corrected, high numbers of complaints, and knowledge obtained by inspectors during individual, routine inspections.
- Determine the scope of the individual broad-based system assessments based on comprehensive planning that considers all information available on a railroad's safety performance, including the adequacy of railroad inspection records.
- Reexamine periodically the allocation of Federal inspectors until a shifting of inspector resources to system assessments is achieved.

AGENCY COMMENTS AND OUR EVALUATION

In commenting on our draft report, the Department of Transportation (DOT) acknowledged that FRA generally agreed with our proposal that a shift in emphasis to more system assessments is needed. DOT asserted that over the past year, FRA has moved a long way in this direction. DOT agreed that reorientation of the safety program was desirable and noted that FRA's goal was an optimal mix of broad-based system assessments, special task force assessments, conferences, and individual inspections. We commend FRA for recognizing the need for a shift in emphasis and for an optimal mix goal; however, we question whether FRA has adequately reoriented its program. A mix consisting of no broad-based, multidisciplinary assessments in fiscal year 1981 and only one such assessment scheduled for fiscal year 1982 does not convince us that an adequate shifting of inspector resources to system assessments has occurred.

DOT, in its response, stated that FRA conducted 46 special task force assessments in 1981 and 4 comprehensive safety analysis conferences, thereby indicating a reorientation has occurred. Only three of these assessments, however, included more than one railroad specialty area. The vast majority of the assessments were of limited scope and involved inspectors in only one railroad specialty area. We are unable to evaluate the comprehensive safety analysis conferences because they were

recently instituted and no data was available to demonstrate effectiveness. However, if such conferences increase the dialogue between the top management of the railroads and FRA, then the potential for improved rail safety exists.

DOT indicated that criteria has been developed for selecting targets for special task force assessments and comprehensive safety analysis conferences. This only addresses part of the condition we observed. We found that FRA lacked criteria for selecting railroads for broad-based system assessments. We still believe FRA needs such criteria to effectively use its resources and convince railroads of the magnitude of their problems.

While DOT did not directly challenge our conclusions on FRA's territorial coverage, it asserted that our analysis was questionable because it failed to consider relevant factors, such as traffic density, hazardous material traffic, and passenger traffic. We do not believe the factors DOT cited are necessary to arrive at our conclusions because (1) there are entire, heavily traveled territories that have no assigned inspectors, (2) FRA's inspectors have serious reservations about their ability to adequately cover their assigned territories, and (3) regional directors and other regional management perceive critical gaps in FRA's coverage. FRA's regional personnel with whom we discussed this issue are familiar with the factors affecting the ability of inspectors to cover their territories. Further, as pointed out in our recently issued report "Programs For Ensuring The Safe Transportation Of Hazardous Materials Need Improvement" (CED-81-5, November 4, 1980), DOT lacked enough inspectors to cover the entire hazardous materials industry within a reasonable time.

CHAPTER 3

THE CIVIL PENALTY: AN INSUFFICIENT

TOOL NEEDING GOALS AND CONTROLS

Even with our recommended shift in monitoring emphasis toward more system assessments, a good civil penalty process will still be necessary. Although this enforcement tool by itself has not been sufficient to cause railroads to adequately comply with Federal safety standards, it is an important tool for FRA to use in certain situations. Railroads must be convinced that when cited for a safety violation, the civil penalty will be swift and sure; this has not been the case over the last 3 years. FRA processed cases slowly and terminated violations or lessened penalties for many violations through negotiations with railroads. The effectiveness of civil penalties is diminished by FRA's lack of timeliness in settling cases. The average case settled in fiscal year 1981 took 20 months to complete.

FRA does not have an adequate system of management controls for processing violation reports. No office within FRA is required to track the status or disposition of violation reports in the system. Further, there are no headquarters' prescribed procedures or criteria for regional recordkeeping relating to the violation reports, and each FRA office we reviewed maintained files differently. As a result, the overwhelming majority of FRA's field staff are not sure of the final disposition of violation reports entering the civil penalty process. Ultimately, the effectiveness and credibility of the enforcement program suffers when adequate controls and feedback are lacking.

UNTIMELINESS IN SETTLING CASES DIMINISHES EFFECTIVENESS OF CIVIL PENALTIES

Between a 1978 Office of Technology Assessment report ^{1/} and 1981, the average time from the occurrence of a safety violation to final settlement of the civil penalty had increased by 25 percent. This further diminishes the effectiveness of an already weak enforcement tool. As processing time increases, the deterrent value of the penalties decreases, compromises of the penalties are more probable, the total cost of U.S. Treasury short-term borrowing is increased because collection of fines is untimely, and the railroads complain about the difficulty in investigating older allegations. At the end of 1981, FRA had no enforced goals or standards for the time it should take for the various phases of processing violation reports and assessing penalties. There was no incentive to process cases promptly.

^{1/} Office of Technology Assessment, "An Evaluation Of Railroad Safety," May 8, 1978.

FRA's processing of
violations takes too long

The timeliness of FRA's violation process has worsened over the last several years, adversely affecting the deterrent value of the penalties and pressuring the Office of the Chief Counsel to compromise older violations in claims conferences. Since 1978, two studies have criticized the length of time FRA takes from the time a safety violation occurs to the time a civil penalty is settled. The May 1978 Office of Technology Assessment report stated that:

"the time between occurrence of a violation and enforcement of a penalty, usually a fine, averages approximately 16 months, * * * this clearly reduces the impact of the penalty as a deterrent to violation of safety requirements."

More recently, a study on hazardous materials penalties performed under contract for the Department of Transportation's General Counsel disclosed that FRA took 16.7 months from date of violation to date of settlement for violations settled between July 1979 and June 1980.

In a random sample of all cases settled in fiscal year 1981, we determined the average time from date of violation to settlement of the civil penalty had increased to 20 months, distributed as follows to the major processing phases:

- 4-1/2 months to write and review violation reports in the regional offices before forwarding them to FRA headquarters.
- 6-1/2 months for the headquarters Office of the Chief Counsel to review reports and provide official notification to the railroad.
- 9 months to actually meet with the railroad and settle.

Each of the previously cited reports discussed the decreasing deterrent value of violations as the date of violation to date of settlement time frame increases. An official in the Office of the Chief Counsel said the FRA attorneys are more likely to agree to compromises on older cases in claims conferences. Our review of the cases settled between fiscal years 1978 and 1981 disclosed the penalty compromises and terminations by FRA were extensive, ranging from 46 to 56 percent of the total amount

assessed. For these 4 years, FRA initially assessed a total of \$52,297,250. However, FRA terminated or compromised about one-half of this amount during the claims conferences, settling for \$26,245,653. While part of this change can be attributed to the elimination of certain freight car standards during the time the cases were in process and to information presented at claims conferences by the railroads, the age of the cases remains a significant component in the level of penalty compromised.

We agree that the 16-month average processing time cited in the 1978 Office of Technology Assessment report reduces the impact of the penalty. In addition, the current 20-month time frame is even more costly to the U.S. Treasury. If the \$15.3 million in fiscal year 1980 penalties could have been collected 4 months earlier, the U.S. Treasury's cost of borrowing could have been reduced by approximately \$600,000.

The railroads have difficulty investigating alleged violations which occurred over a year earlier. In fiscal year 1980, at least two railroads on four separate occasions protested FRA's delay. One stated:

"It becomes increasingly difficult as time passes for us to verify the violation you are claiming. It is not enough that we were at one time aware of the inspections being conducted because we have no way of knowing whether what may have been considered violations at that time will actually mature to the point where you send them to us as much as 4-1/2 years later."

FRA lacks goals for processing violations and assessing penalties

FRA, as of December 31, 1981, had no enforced goals or standards for the various phases of processing violation reports and assessing penalties. There are no limits on the amount of time an inspector may take to write a violation report or on the time a district chief or regional office specialist can take to review the report. Although a statutory 60-day goal exists for processing violation reports from State inspectors, the Office of the Chief Counsel, as of December 31, 1981, did not have any time criteria for processing reports from FRA's inspectors. Finally, FRA does not have a standard procedure or time-frame goals for bringing cases to conference.

Four and one-half months for regional office preparation and processing of violation reports is too long. Although report format and documentation requirements vary by railroad specialty area, inspectors may typically take up to 2 weeks to gather documentation and 2 days to write the report. District chiefs take a minimal amount of time to review violation reports and the regional specialist's review takes anywhere from 5 minutes to 8

hours. In addition, other factors appear to contribute to the total time required to process violation reports in the regional offices. Violation reports are accumulated into batches before being forwarded to FRA headquarters. One regional office did not have sufficient typing support, contributing to the untimely processing of reports. Also, regional office staff at all levels frequently had other responsibilities, including accident investigations; complaint investigations; and individual, routine inspections, that diverted their attention from violation report processing.

Based on our sample, the Office of the Chief Counsel was taking longer than it had historically to review and process cases. Within the Office of the Chief Counsel, emphasis had shifted away from the timely processing of violation reports submitted by FRA inspectors. Beginning in July 1980, the Office of the Chief Counsel was expected to take action on violation reports within 90 days of their receipt from the regional offices. The office was able to meet or exceed this goal for several months. However, staffing in the office has since been reduced and the 90-day processing goal was deleted in the first half of 1981. The Federal Railroad Safety Authorization Act of 1980 (Public Law 96-423), section 5, indirectly established a 60-day goal for FRA to notify railroads of violations submitted by State inspectors. According to officials in the Office of the Chief Counsel, these reports are processed on priority basis and the 60-day goal is usually met.

An average of 9 months elapses between the date a railroad is formally notified of a violation and the final settlement. This is the longest segment in the process. A combination of at least three factors contribute to this extensive delay. First, FRA's only sanction against the railroads which will not meet to discuss or settle claims is the option of litigation, seeking the maximum permissible penalties. Although this procedure has been used successfully by FRA, an official within the Office of the Chief Counsel feels that it cannot be applied extensively in the absence of the ability to follow through with a high volume of cases. Second, with limited probability of litigation, railroads have little incentive to settle cases promptly. Rather, they will attempt to retain their assets for as long as possible. Finally, the Office of the Chief Counsel lacks specific time goals for this phase of the process and has not been allocated necessary resources to settle cases on a timely basis.

By establishing an average 2-month processing goal for regional offices and reinstating the 3-month requirement for Office of the Chief Counsel's review, 25 percent of the total current time needed to process violation reports could be saved.

Placing increased emphasis on more timely settling of cases could also result in further time savings. However, in the absence of goals for each step in the process, there is little incentive for FRA to efficiently dispose of violations and thereby improve the effectiveness of the civil penalty as an enforcement tool.

IMPROVED RECORDKEEPING PROCEDURES
NEEDED TO CONTROL ENFORCEMENT PROCESS

FRA's current recordkeeping procedures preclude any overall reconciliation of the violation reports entering the system with reports of closed cases. A senior Office of Safety official advised us that all violation reports rejected during technical review are examined by the Director, Office of Standards and Procedures, and are returned to the initiating regional office signed by the Associate Administrator for Safety. However, we found that individual violation reports in at least one railroad specialty area were terminated during the technical review process with neither headquarters management nor the regional offices knowing about it. No procedures exist for informing the regional offices when a violation is terminated in claims conference or for providing the offices with the rationale for the termination. Finally, FRA has not established criteria for what information is to be maintained in regional office files. In the four FRA regions reviewed, records were not uniform and failed to accurately reflect the status of violations submitted. As a result, only 11 of 73 regional personnel indicated they were adequately informed when their violation reports were settled. Additionally, without adequate controls, FRA management cannot measure the timeliness of the process, or determine the ultimate disposition of all violations that enter the system.

Regions need to be notified when
headquarters terminates violations

Regional offices are not always informed when FRA headquarters terminates violation reports during technical reviews or agrees to drop a violation during the claims conference. Feedback to the regional offices is vital in affirming the integrity of the system and in educating inspectors about changes in the regulations, enforcement philosophy, or documentation requirements. Although procedures exist for informing regional offices when a violation is dropped during technical review, they are not always followed. In 29 out of 90 cases in one railroad specialty area over an 8-month period, the FRA headquarters technical reviewer declined enforcement action without notifying the regional offices. In fiscal years 1980 and 1981, the Office of the Chief Counsel agreed to drop a total of 5,218 violations during claims conferences as a result of information provided by the railroads. Although the Office of the Chief Counsel documents why each violation was dropped in its own files, this information is not provided to the regional offices. For overall reconciliation of the system to occur, violations terminated in

claims conference or technical review must be identified and the regional offices should be informed. This feedback would also help regional offices do their job better in the future and assist them in dealing with the railroads because they would know the status of civil penalty actions taken against these same railroads.

Regional recordkeeping
needs improvement

The regional office files that we reviewed could not always be used to keep inspectors informed of action taken on their violations or as a way of measuring the timeliness of FRA headquarters' review of violation reports. Under FRA's current practice, courtesy copies of headquarters notification of violation to the railroad are to be sent to the regional offices. If enforcement is declined by the Office of the Chief Counsel, a form letter is sent to the regional office explaining the reasoning. However, FRA has no requirement that this information be maintained by the regions or that it be usefully organized.

We examined regional office files for over 9,500 violation reports submitted between January 1, 1979, and June 30, 1981, by the four regional offices. We reviewed the files to determine if they showed the reports had been received, reviewed, or settled by FRA headquarters. We found that the files contained no evidence in 25 percent of the cases that the violation reports had been received, reviewed, or settled by FRA headquarters. By examining Office of the Chief Counsel records, we traced 350 violations transmitted from regional offices between July 1, 1980, and February 28, 1981, and which, according to regional files, were not acknowledged by FRA headquarters. We found that

--265 had been processed by the Office of the Chief Counsel with formal notification provided to the railroad and regional office,

--enforcement was declined by the Office of the Chief Counsel on 23,

--29 had been received but not acted on, and

--33 were not recorded as received.

It is clear that increased FRA recordkeeping requirements and procedures are necessary to control the process and enable the regions to provide adequate information to their inspection force on the status of the violation reports.

CONCLUSIONS

FRA's safety program needs the civil penalty enforcement tool. The effectiveness of the civil penalty, however, is being adversely affected by the length of time taken to process violation reports and the lack of feedback given on violations' status to all offices involved in the system. Further, both FRA headquarters and regional office management lack the necessary controls to assure that proper disposition is made of all violations. These problems might be diminished, but not eliminated, by FRA shifting its efforts to more broad-based system assessments.

AGENCY COMMENTS AND OUR EVALUATION

Although DOT agreed that time goals are desirable in theory, it presented a detailed explanation of why "such goals would be meaningless if applied to all stages of the process and to all types of claims." However, FRA's Office of Safety on March 1, 1982, established just such a goal for writing and processing violation reports at the regional offices.

DOT asserts that there are "economies of scale" in delaying the scheduling of claims conferences. This may be true; however, FRA could not provide any support for this contention.

While DOT's response defined some of the activities with which FRA's Office of the Chief Counsel was involved over the last few years, we still believe DOT's objections to time goals for processing and settling violations are not in the best interests of rail safety and sound program management. Allowing cases to languish, some exceeding the statute of limitations and others taking 4 years to settle, has a deleterious effect on rail safety. We are not recommending rigid goals for each step in the violation process. We expect FRA will develop flexible goals reflecting the criticalness of certain violations while assuring that all violations are settled in a reasonable time--significantly less than the 20-month average observed in this report.

We do not agree with FRA's assertion that hazardous materials claims were settled on a priority basis, much faster than the 20-month average. Our statistically valid sample was stratified to determine the timeliness of all hazardous materials violations settled in 1981. It showed that the average hazardous materials case was 20-months old when settled. Our data on the time required to review, process, and transmit the penalty demand letter is similar to FRA's (150 days compared to FRA's 120 days). Likewise, we essentially agree the violations took 8 months to settle. (Our sample showed 7-1/2.) However, DOT failed to consider the average hazardous materials violation was 6-1/2 months old before it reached the Office of the Chief Counsel. Despite FRA's attempt to settle hazardous materials violations on a priority

basis, our sample indicates that these claims were not settled on a more timely basis than other claims.

We acknowledge that the increased cost of U.S. Treasury borrowing is incidental to the delays in processing violations and settling cases. While we support the concept of compromising claims when appropriate, timely compromise is essential. The timely processing and settlement of violation reports will have a residual benefit to the U.S. Government in reducing its short-term borrowing costs.

DOT asserts that FRA's existing recordkeeping procedures will, to a great extent, achieve the objective of our recommendation that FRA monitor the status and disposition of violation reports at all phases of the civil penalty process. It may currently be possible to monitor the status and disposition of some reports if the regional offices perform a necessary reconciliation. However, (1) regional offices do not always perform this reconciliation, (2) FRA has no requirement that its regional offices monitor case disposition, and (3) in 25 percent of the cases we reviewed, the regional offices files did not contain a copy of the Office of the Chief Counsel's notification of violation to the railroad. Without this document, regional offices have no systematic means of determining if violations have been settled.

Responding to our draft report, FRA's Office of the Chief Counsel implemented a new procedure of sending the regional offices a monthly list of violation reports received. This was first done at the beginning of March 1982. We commend FRA's timely action of this matter. However, to be effective, the regional offices should review the monthly lists and resubmit reports not received by FRA's Office of the Chief Counsel.

We do not believe that the Office of the Chief Counsel's occasional enforcement bulletins explaining particular types of terminations, such as changes in freight car regulations, completely meet the objectives of our recommendation of keeping regional offices informed. Notice of termination of all claims is necessary for both educational and recordkeeping purposes. While the Office of the Chief Counsel's enforcement bulletins do meet the educational objective, the fact that they are only issued when there are a large number of particular types of terminations means that most individual violations will still be terminated without notice. Without this notice the integrity of the recordkeeping procedures is diminished.

RECOMMENDATIONS

We recommend that the Secretary of Transportation direct the Administrator, FRA, to:

- Establish goals for the timely processing of violation reports at all levels and monitor staff ability to meet these goals.
- Monitor the status and disposition of violation reports at all phases of the civil penalty process.
- Require the Chief Counsel and the Associate Administrator for Safety to provide the regional offices with a monthly list of all violation reports received.
- Require the Chief Counsel to notify the originating regional office when a violation is terminated in claims conference and provide the reason.

CHAPTER 4

STATE PARTICIPATION PROGRAM

NEEDS IMPROVEMENT

If, as we suggest, FRA directs more of its inspection resources to broad-based system assessments, there will be a continuing or increased need for State government participation in the enforcement program, primarily to perform individual, routine inspections.

Program growth, both in terms of number of States and number of inspectors, has not met FRA projections. We do not believe this is especially critical at this time since certain aspects of the program need improvement and accomplishing specific improvements should take priority over achieving program growth goals. Areas needing management attention are:

- FRA's method for determining the number of State inspectors for which it will provide salary and expense reimbursement does not consider important factors, such as the flow of hazardous materials and density of traffic, that could influence how many inspectors are authorized for each State.
- Changes in the level of State participation are not adequately considered when assigning FRA inspectors.
- FRA's evaluation process for the program is not comprehensive and only focuses on financial aspects and individual inspector performance. It does not assess, among other things, the consistency in State enforcement.

As a result, FRA's implementation of the State participation program may not be supporting a uniform level of national rail safety enforcement.

PROGRAM GROWTH GOALS NOT ACHIEVED

The State participation program, since its inception in 1974, has experienced slow growth. Although FRA's initial response to the program was not favorable, it has since conducted extensive efforts to recruit States into the program. Despite FRA's recruitment attempts, the program has not met growth projections. Further, because of funding considerations within State governments, the program may not grow in size and may actually even decline.

FRA, in a 1976 report to the Congress, projected that 26 to 34 States with 187 to 243 inspectors would be participating in the program by fiscal year 1981. FRA, in 1980, revised its projection to 36 States with 125 inspectors. However, only 31

States with 94 inspectors were participating in the program at the end of fiscal year 1981.

FRA, in projecting up to 243 State inspectors by fiscal year 1981, assumed that States would be participating in all FRA safety specialty areas except hazardous materials. However, as of December 31, 1981, FRA had authorized States to employ inspectors only in the track and freight car specialty areas. FRA had prepared regulations that would authorize States to also employ inspectors in the operating practices and signal specialty areas, but these regulations had not been issued as of December 1981.

Program growth goals have not been achieved for several reasons. Some States have been reluctant to participate in the program because they believe they would be duplicating safety inspection work done either by the railroads or FRA. Texas maintains that the Federal Railroad Safety Act of 1970 gives jurisdiction in this matter to FRA and involvement on their part does not appear necessary in view of FRA's role. Wisconsin has indicated that it will not participate because a comprehensive inspection program that duplicates activities required of the railroads is a waste. Virginia, after being reluctant for years to enter the program because FRA was already monitoring the railroads' safety inspection function, finally joined the program in late 1981.

Some States have difficulty attracting qualified inspectors at authorized State salary levels. For example, Massachusetts, according to an FRA official, has been unable to recruit a track inspector because of the \$12,000 annual starting inspector salary authorized by the State. Also, Louisiana, experiencing problems recruiting an additional inspector, recently increased the starting inspector salary to \$24,000.

The National Association of Regulatory Utility Commissioners and FRA Office of Safety and regional office management officials said that the number of States participating in the program or their level of participation may begin to decline because of budgetary or economic considerations within State governments. Michigan, for example, has informed FRA that it may be unable to continue in the program if economic conditions within the State do not improve.

METHOD FOR DETERMINING NUMBER OF STATE INSPECTORS SHOULD BE CHANGED

FRA's method for determining the number of State inspectors needed in each State is based on track mileage and freight car volume and does not consider other important factors that could affect the number of inspectors authorized for each State.

In 1975 FRA State participation regulations prescribed the maximum number of State inspectors for each State for which FRA would provide up to 50-percent reimbursement. This determination was based on track mileage within the State, with 4,400 miles allocated per State track inspector, and freight car volume within the State, with one State freight car inspector for every 14,280 freight cars to be inspected. Further, FRA provided that States could petition to be reimbursed for up to double the number of initially authorized inspectors, but it did not list the specific factors required to demonstrate the necessity of additional investigation and surveillance effort.

The method FRA used in 1975 to determine the number of State inspectors eligible for reimbursement was inadequate because FRA did not consider factors it considers important in scheduling its own inspections, such as:

- Flow of hazardous materials.
- Density of passenger and freight traffic.
- Economic conditions of railroads because companies in poor financial condition may not be ensuring the desired level of safety.
- Adequacy of railroad maintenance and inspection programs.
- Extent of railroad compliance (ratio of defects to units inspected and number of violations reported).
- Number of accidents and their causes.

FRA has not reexamined its formula for determining the number of inspectors authorized for reimbursement in each State since 1975. The factors--miles of track and freight car volume--it considers may not be as important now or could have changed since that time. Also, it is very likely that the factors not considered at that time, as discussed above, may have changed since 1975. Not only is it important that FRA expand the factors it considers in determining the number of authorized State inspectors, but it should also periodically reexamine the authorized levels of participation as conditions change and make adjustments when warranted.

NEED FOR FRA TO CONSIDER
STATE PARTICIPATION WHEN
ASSIGNING FEDERAL INSPECTORS

FRA has had opportunities to adjust the assignments of its inspectors based on changes in the number of participating States and number of inspectors per State. FRA, however, has not adequately considered present and future levels of State participation when assigning its Federal inspectors.

The State participation program, contrary to expectations and projections, has grown slowly since its inception in 1974. Changes in the number of participating States and number of State inspectors are shown below.

<u>End of fiscal year</u>	<u>Number of States</u>	<u>Number of inspectors</u>		
		<u>Track</u>	<u>Freight car</u>	<u>Total</u>
1974	7	8	0	8
1975	11	15	0	15
1976	14	22	12	34
1977	19	33	12	45
1978	25	43	23	66
1979	28	54	30	84
1980	30	57	28	85
1981	31	63	31	94

The general trend during this period was toward growth, but three States have withdrawn from the program and the number of inspectors per State fluctuated. As discussed earlier (see p. 12), the deployment of FRA's inspectors affects the ability of inspectors to cover their territories. With its current monitoring and deployment approaches, FRA should be focusing on its ability to adequately cover territories considering the level of State participation. FRA's responses to changes in the level of State participation are critical in achieving effective inspector allocation.

FRA has not taken full advantage of opportunities to reassess or better place its limited number of inspectors on the basis of changes in State participation. FRA has reacted to State participation at times by not filling Federal vacancies. As of December 1981, for example, FRA was planning not to fill a track inspector position in its Chicago regional office in part because of the presence of State inspectors in Michigan and Minnesota. FRA, however, does not appear to have taken advantage of other opportunities to reassess or better place its inspectors. For example:

--In one northeastern FRA region, a FRA track inspector commented he could more than adequately cover his territory because the number of State inspectors in his territory had grown from zero to four. He further expressed the concern that the State had too many inspectors.

- In the same northeastern FRA region, another FRA track inspector noted that he too could more than adequately cover his territory of 1,500 miles of track in about 4 months. Approximately 40 to 50 percent of the territory he previously covered was being covered by the participating State.
- In a midwestern FRA region, a FRA district chief commented that track coverage in his district was excellent when compared to coverage in 1974. One State in his district which joined the program in 1977 had four track inspectors in addition to a FRA inspector. He was concerned his district had too many inspectors.
- In a western FRA region, a FRA track specialist commented that Federal track inspectors in two participating States could adequately cover their territory without State help. This indicates that the Federal track inspectors may be underutilized.
- In a southern region, the FRA track specialist disclosed that his inspectors were generally unable to cover their territories. One State had over 50 percent of the total track mileage in the region and was not participating in the program.
- In another northeastern region, the regional director was concerned about the adequacy of coverage in his region because of a recent reduction in the number of inspectors in the largest State program in his region.

NEED FOR IMPROVED PROGRAM EVALUATION

Program evaluation is an integral part of effective management. It provides the feedback which an agency needs to measure performance against objectives and, when necessary, to redefine those objectives. FRA's evaluation process focuses mainly on financial aspects and on the performance of individual State inspectors. The process does not assess other important factors necessary to achieve program objectives.

Each State participating in the program is required to submit a semiannual report to FRA disclosing inspector activities and financial expenditures. FRA's Office of Safety, with regional office assistance, reviews the State submissions and authorizes the payment of Federal funds for up to 50 percent of approved State expenditures. Regional staff obtain information on individual State inspector performance by accompanying inspectors on actual inspections and reviewing the inspectors' reports. They may also obtain information by inspecting areas or locations State inspectors recently inspected.

FRA's method of evaluating the State participation program is limited and does not formally assess the:

- Extent and adequacy of administrative, technical, and financial program guidance provided by FRA to the States.
- Methods, frequency, and type of information exchange between Federal and State inspection personnel.
- Consistency of State enforcement policies, practices, and procedures.
- Changes or anticipated changes in the number of State inspectors.

FRA also needs to broadly assess the benefits and impact of the State program on its efforts to provide uniform national railroad safety enforcement and to assure that FRA is effectively utilizing its rail safety resources. A cognizant Office of Safety official informed us that, though FRA had planned to conduct such a review, it had not done so.

CONCLUSIONS

The participation of State governments in rail safety enforcement has had a positive effect by supplementing FRA's inspection force. We envision a continuing need for State participation as FRA directs more of its inspection resources to broad-based system assessments.

State participation has not grown as much as FRA had planned, but this is not especially critical at this time since certain aspects of the program need improvement. To ensure efficient use of limited resources, such improvements should take priority over program growth. Problems in the program include:

- The way FRA determines the number of State inspectors for which it can provide reimbursement.
- How FRA assigns its inspectors in relation to State inspectors.
- How FRA evaluates the State participation program.

As a result, FRA's implementation of the State participation program may not be fully supporting a uniform level of national rail safety enforcement.

RECOMMENDATIONS

We recommend that the Secretary of Transportation direct the Administrator, FRA, prior to attempting to significantly expand the program, to:

- Determine, based on factors such as the flow of hazardous materials, density of passenger and freight traffic, and number of accidents and causes, the number of State inspectors for which FRA can provide reimbursement.
- Assign or reassign Federal inspectors based in part on changes in the level of State participation.
- Broaden the scope of periodic assessments of the State participation program to assess, among other things, the consistency in State enforcement.

AGENCY COMMENTS AND OUR EVALUATION

DOT, in commenting on our draft report, did not address the proposals on the State participation program. DOT responded that the State participation program could become a moot issue under the President's fiscal year 1983 budget, since grants to the States would be eliminated. We believe that, barring termination of the program, the Secretary should adopt our recommendations.

PREVIOUS GAO REPORTS ON RAIL SAFETY

Since 1975 we have issued seven reports directly related to FRA programs regarding rail safety. Although in a number of cases FRA indicated positive changes would be implemented, the changes were not always complete. Several of the more significant observations included:

- In our April 11, 1975, letter to the Secretary of Transportation (RED-75-348), we questioned FRA's monitoring approach; specifically, the fact that such inspections were supplementary to those of the railroads. FRA officials responded that the new safety program would take a multidisciplinary team approach and reassign FRA's limited field personnel to achieve more equitable distribution of responsibility.
- In our report to the Subcommittee on Transportation and Commerce, House Committee on Interstate and Foreign Commerce, "Commuter Railroad Safety Activities On Conrail's Lines In New York Should Be Improved" (CED-78-80, March 15, 1978), we noted FRA had made no progress for about 2 years in implementing its safety program and that FRA continued enforcing safety regulations by performing supplementary inspections.
- In our 1980 report to the Senate Committee on Commerce, Science, and Transportation on "Programs For Ensuring The Safe Transportation Of Hazardous Materials Need Improvement" (CED-81-5, November 4, 1980), we observed that (1) FRA was reluctant to encourage States to participate in the inspection program, (2) FRA was slow to issue regulations and guidance to the States, (3) FRA had restrictive inspector standards, (4) Federal restrictions had been placed on the State inspection and enforcement role, and (5) State inspector salaries were not commensurate with Federal inspector salaries.

FRA AND STATE GOVERNMENTLOCATIONS VISITED DURING REVIEWFRA LOCATIONS

Headquarters	Washington, D.C.
Regional offices	Chicago, Illinois Fort Worth, Texas Philadelphia, Pennsylvania Portland, Oregon
Field locations within regional offices	<u>Chicago, Illinois</u> Indianapolis, Indiana Minneapolis, Minnesota <u>Fort Worth, Texas</u> Houston, Texas New Orleans, Louisiana Oklahoma City, Oklahoma San Antonio, Texas <u>Philadelphia, Pennsylvania</u> Baltimore, Maryland

STATE GOVERNMENT LOCATIONS

Baltimore, Maryland
Baton Rouge, Louisiana
Harrisburg, Pennsylvania
Lansing, Michigan
Minneapolis, Minnesota
New Orleans, Louisiana
Oklahoma City, Oklahoma
Springfield, Illinois



**U.S. Department of
Transportation**

Office of the Secretary
of Transportation

Assistant Secretary
for Administration

400 Seventh Street, S W
Washington, D C 20590

March 10, 1982

The Henry Eschwege
Director, Community and Economic
Development Division
U.S. General Accounting Office
Washington, D.C. 20548

Dear Mr. Eschwege:

We have enclosed two copies of the Department of Transportation's (DOT) reply to the General Accounting Office (GAO) draft report, "The Federal Approach to Rail Safety Inspection and Enforcement: A Time for Change," dated February 11, 1982.

The report addresses three distinct areas: Federal Railroad Administration's (FRA) program for monitoring rail safety; the civil penalty process; and the state participation program. The Department agrees generally with the thrust of GAO's recommendation and is working to improve our rail safety effectiveness.

If we can further assist you, please let us know.

Sincerely,

A handwritten signature in black ink, appearing to read "Robert L. Fairman".

Robert L. Fairman

Enclosures

DEPARTMENT OF TRANSPORTATION REPLY
TO
GAO DRAFT REPORT DATED FEBRUARY 11, 1982
ENTITLED
"THE FEDERAL APPROACH TO RAIL SAFETY
INSPECTION AND ENFORCEMENT:
A TIME FOR CHANGE"

INTRODUCTION

These comments are provided in response to the General Accounting Office's draft report entitled "The Federal Approach to Rail Safety Inspection and Enforcement - a Time for Change", which was submitted to the Department of Transportation on February 11, 1982. GAO's stated objective was to determine the effectiveness of the rail safety program administered by the Federal Railroad Administration. The draft report addresses three distinct areas: FRA's program for monitoring rail safety, the civil penalty process, and the state participation program.

GAO concludes that all three elements of FRA's safety program are ineffective; however, GAO offers no support for this conclusion. In fact, available data reveal that in the first eleven months of 1981, the year of GAO's review, train accidents declined by 30.8 percent and rail-related casualties by 14.8 percent. These figures reflect the persistence of a trend, showing dramatic improvement in rail safety during the past two years. [See GAO note 1, page 54.]

GAO's proposals amount to a judgment that, given the spectrum of available safety-promoting tools, GAO would employ a somewhat different mix than FRA has used in the past. FRA agrees with the general thrust of this recommendation and over the past year has moved a long way in this direction.

COMMENTS

I. FRA's Monitoring Program.A. GAO Findings and Recommendations.

The draft report observes that individual, "routine" inspections of discrete portions of a railroad's operations constitute FRA's primary method of monitoring the industry's safety performance. This method is said to be largely ineffective because it is not capable of covering a sufficient portion of the industry in a given year, because it narrowly focuses on individual defects rather than a railroad's overall "commitment" to safety, and because it fails to get the attention of upper-level railroad management.

To address these perceived problems, GAO offers four recommendations:

1. Decrease emphasis on individual, routine inspections and allocate a larger proportion of inspector resources to system assessments.
2. Reexamine periodically the allocation of Federal inspectors until a shifting of inspector resources to systems assessments is achieved.
3. Develop procedures for conducting broad-based system assessments based on comprehensive planning that considers all information available on a railroad's safety performance, including the adequacy of railroad inspection records.
4. Develop criteria for selecting railroads for broad-based system assessments which would consider factors beyond accidents. This should include information such as high defect ratios, defects not being corrected, high number of complaints, and knowledge obtained by inspectors during routine inspections.

B. Summary of the Department's Position.

The first recommendation calls for a shift toward more system-wide assessments of railroads. Recent practice and current plans show that FRA has already shifted its emphasis toward system assessments and less extensive "special task force assessments" where these approaches may be useful. In addition, FRA has recently conducted comprehensive safety analysis conferences with four major railroads and plans more

of these sessions this year. FRA's goal is an optimal mix of broad-based assessments, special task force assessments, conferences, and individual inspections.

The second recommendation calls for shifting more inspectors to system assessments. GAO criticizes FRA's allocation of inspectors because the geographic miles in the inspectors' territories vary widely; however, GAO's analysis may be questioned because it fails to consider relevant factors such as traffic density, hazardous material traffic, and passenger traffic. In its National Inspection Plan, FRA considers all of these important factors in determining inspector deployment for a given year. In order to increase coverage of vital areas, FRA has requested appropriations for 20 new inspector positions and a 21 percent increase in safety enforcement dollars (including an additional \$1.5 million in travel money for inspectors) for fiscal year 1983.

The third recommendation largely describes the procedures actually used by FRA in 1981 in conducting its special task force assessments. We agree that the adequacy of railroad inspection records deserves greater emphasis in these assessments, and FRA will stress that factor.

The fourth recommendation has already been implemented in selecting targets for special task force assessments and comprehensive safety analysis conferences.

C. Discussion.

The draft report recommends a shift of emphasis from individual, site-specific inspections of railroad equipment, facilities, and operations to "more integrated, multi-disciplinary team broad-based system assessments". GAO suggests that, because FRA is preoccupied with specific defects, it cannot properly address the general, system-wide causes of those defects. Although there are some weaknesses in GAO's analysis, FRA agrees that reorientation of the safety program is desirable and has already begun that process.

As noted in the draft report, FRA conducted 46 special task force assessments in 1981. (These assessments are less than system-wide, but cover all inspector disciplines in a given region.) In addition, FRA conducts comprehensive safety analysis conferences with major railroads. Four of these

conferences, plus three follow-up conferences, were conducted last year. Criteria for conducting these conferences include the carrier's accident record, number of complaints, defect ratios, and other information obtained by inspectors during routine inspections that is relevant to the railroad's safety performance. During these conferences, top FRA headquarters and regional personnel work with top railroad management in addressing the overall safety posture of the railroad, as well as the trend of its safety record in comparison with other railroads. Solutions for system-wide and site-specific problems are jointly developed. Railroad management has demonstrated a positive attitude toward these safety conferences, and FRA will continue to stress these comprehensive carrier safety conferences as part of its inspection program.

The report correctly notes that individual inspections are needed in certain cases. Without a clear idea of the specific conditions on a railroad, FRA is not in a position to make broad assessments. To maximize the effectiveness of the individual inspections, FRA has developed a National Inspection Plan, which will be updated annually. The National Inspection Plan identifies the number and type of inspections to be conducted in each inspection discipline. In developing the plan, the FRA Regional Directors are provided with detailed instructions for making their determination of the required inspections.

GAO's final report should note that not all safety problems are system-wide. Thus, there is a clear need for a safety program directed to identifying and correcting essentially local problems. One of FRA's management tasks is to allocate its resources and select the appropriate tools for addressing systemic, divisional, and localized problems.

[See GAO note 2, page 54.]

The draft report correctly notes the need to gain the attention of railroad management. System assessments by their nature accomplish this. Localized problems present much greater difficulties in this respect. One advantage of the large claims settlement conference discussed below is that by aggregating localized claims it is possible to bring these matters before higher levels of management.

II. The Civil Penalty Process.

A. GAO Findings and Recommendations.

The draft report concludes that the effectiveness of the civil penalty as an enforcement tool is being adversely affected by the length of time it takes to process violation reports, and by the lack of feedback on the status of violations to all offices involved.

GAO makes four recommendations that it maintains will improve the effectiveness of civil penalties as a tool in the railroad safety program:

1. Establish a procedure to monitor the status and disposition of violation reports at all phases of the civil penalty process;
2. Require the Office of the Chief Counsel and the Office of Safety to provide the regional offices with a monthly list of all violation reports received;
3. Require the Office of the Chief Counsel to notify the originating regional office when a violation is terminated in claims conference and provide the reason for the termination; and
4. Establish goals for the timely processing of reports at all levels and monitor staff performance in meeting these goals.

B. Summary of the Department's Position.

The objective of the first recommendation has, to a great extent, been achieved by FRA's existing recordkeeping procedures, the observance of which has recently been reemphasized within the responsible offices.

The second recommendation has recently been implemented. It provides a useful method of identifying reports that may have been lost in transit or misplaced.

The third recommendation, like the first, has already been substantially implemented by means of existing procedures which serve to ensure that regional offices are aware of the factors that have led to large numbers of terminations over a given period. This information is communicated to the regional offices through Chief Counsel enforcement bulletins and through participation in settlement conferences by headquarters and regional Office of Safety staff.

The final recommendation, that time goals be established for all stages of the enforcement process, is desirable in theory. In practice, however, such goals would be meaningless if applied to all stages of the process and to all types of claims, since their achievement would depend on the interplay of many variables that are subject to wide fluctuation and are beyond the control of the responsible office, e.g., the numbers, types, and severity of violations reported in a given period, the availability of resources, the need to divert resources to more pressing projects (e.g., a compliance order or extensive litigation), and the complexity of settlement negotiations. As an alternative to potentially counterproductive goals, FRA is now developing criteria for selecting the most serious safety violations for which realistic and meaningful goals can be established. Of course, FRA will strive to process the remaining claims as quickly as the variables mentioned above will permit.

C. Discussion.

GAO makes two basic points about the civil penalty process: (1) FRA takes too long to process violation reports, and (2) FRA should introduce more procedural and recordkeeping requirements into the process.

1. Timeliness in Settling Cases.

The draft report criticizes FRA for taking too long (an average of 20 months from date of violation report to settlement, according to GAO's sample of 320 violations) to complete the civil penalty cycle. (FRA's own sample of an equal number of violations indicated an average of about 18 months, a relatively insignificant difference.) The overall statistics, however, obscure the fact that to some degree FRA has been able to prioritize the processing of violations. Despite the intervention of many pressing projects in 1981, FRA reviewed and settled hazardous materials claims (i.e., those arising under the Hazardous Materials Transportation Act, 49 U.S.C. section 1801 et seq.) much faster than the 20-month average calculated by GAO. Hazardous materials claims, on the average, were reviewed, processed, and transmitted to the carrier with a penalty demand letter within 120 days of receipt in the Office of Chief Counsel and were settled within 8 months thereafter. These results reflect a successful attempt by FRA to accord a higher priority to hazardous materials cases, which often involve more serious safety violations than other types of cases.

Because the draft report makes such a point of the somewhat lengthened settlement time in 1981, a word of explanation is in order. The demands on the resources of the Office of Chief Counsel in 1981 increased substantially as it provided legal support to the effort to improve Conrail's performance and transfer it to the private sector. It was necessary to draw upon attorney and clerical resources of the Enforcement Division (which reviews and settles civil penalty claims) to complete this important effort. Also in 1981, the Enforcement Division had to defend five lawsuits filed against FRA in five different Federal courts. FRA successfully defended two of these cases in the district courts, and both are now on appeal. Two other cases have not yet been decided, and the plaintiffs have offered to voluntarily dismiss the fifth case after it was fully briefed in the district court. This litigation burden was twice that handled by the Enforcement Division in an average year. It diverted many hundreds of hours of attorney and clerical time from the civil penalty process.

One element of the draft report deserves special comment. The draft criticizes the delays because they have the effect of increasing the cost of borrowing to the Treasury. This incidental effect is simply not relevant in a discussion of civil penalties, which Congress neither designed nor intended to enhance revenues or reduce expenditures. GAO's own guidelines on the collection of small claims owed to the Government single out civil penalties as a unique type of claim, which can be compromised for any amount that adequately serves the agency's enforcement policy. 4 C.F.R. section 103.5. Civil penalty policies should be governed by safety objectives, not revenue objectives.

The basic recommendation of the draft report's section on civil penalties is that goals be established for the timely processing of violation reports. Setting such goals for the entire process (from violation to settlement) and for all penalty claims is likely to be futile due to the great fluctuation in certain basic variables. First, the number of violations filed in any given month varies widely. This unsteady flow renders rigid goals impractical.

Second, the diversion of Enforcement Division resources from civil penalty enforcement to more pressing duties is not susceptible to precise prediction. For instance, the draft report recommends more system-wide assessments, and states that a compliance order would be a likely result of such an assessment if cooperation were not forthcoming from the subject railroad. Such a system-wide compliance order would occupy the vast majority of the division's resources over a period of

months. Similarly, litigation (offensive or defensive) may be necessary at any time and can render generalized time goals for penalty collection meaningless.

Third, the complexity of settlement negotiations makes the setting of time limits especially unrealistic at this stage. The negotiation stage serves as an important focal point for communication between FRA and railroad management on specific safety problems. Given the many variables at work, rigid time goals would hamper the flexibility of scheduling necessary if the negotiation stage is to consist of more than FRA attorneys talking to railroad attorneys. During negotiations on civil penalties, FRA has industry's attention, and it is desirable to use this opportunity to explore with railroad management safety problems in some depth. It is more rational to permit the negotiation stage to proceed unfettered by artificial deadlines, so that settlement conferences can be used to bring FRA's safety specialists together with their industry counterparts in sessions focusing on specific problem areas. Setting time goals on settlement could also do away with the economies of scale now achieved by settling most cases against major carriers in relatively large batches. For example, if each case had to be settled within 90 days of transmittal, settlement conferences (with their attendant preparation, travel, and costs) would be much more frequent, leaving the Enforcement Division less time available for reviewing claims. For all of these reasons, it would simply be impractical to establish time goals across-the-board for all civil penalty cases. The caveats that would necessarily be attached to such goals would tend to render the goals illusory, and the net effect on railroad safety would be nil at best and perhaps adverse if they divert the focus of effort from the most serious cases.

However, goals can be set for the most serious safety violations, those that have resulted in, or are very likely to result in, a hazardous materials release, passenger train accident, or death or serious injury to a rail employee or private citizen. It appears that this group of claims will usually be small enough to permit processing by the regional office within one month of the violation, and action by the Office of Chief Counsel within an average of 60 days of receipt in that office. This process would result in an average processing time of 90 days from violation to penalty demand letter on the most serious claims, with faster-than-normal negotiations on such claims to be encouraged.

The establishment of processing goals for the most serious violations does not indicate that FRA considers civil penalties to be the sole or the best enforcement tool in its arsenal. Situations may well arise in which the seriousness of a hazard dictates the use of emergency orders or injunctive powers.

2. Recordkeeping Procedures in the Enforcement Process.

The draft report makes three recommendations concerning FRA's recordkeeping procedures, but does not give a complete picture of those procedures. Each violation report bears the inspector's name and a sequential number. The Office of Chief Counsel's Enforcement Division receives violation reports from the regions continually, at an average rate of over 750 violations per month. Each report is logged in when received and, for purposes of efficiency, reports from different inspectors and regions are combined into a single enforcement case, with the railroad and type of regulation violated (e.g., safety appliance) being the only common elements in a case. An appendix to the penalty demand letter lists the violation reports (by inspector and number) included in that case, and the affected regions receive copies of the demand letter and appendix on each case. When a case is settled, the Enforcement Division sends a memorandum to FRA's accounting division to open an account receivable showing the case number and the amount due on each case. The regions also receive copies of this memorandum.

Therefore, it is currently possible to monitor the status and disposition of each report if the regional offices each perform the necessary reconciliation tasks (i.e., reviewing case appendices for their reports and noting the settlement of those cases when copies of account receivable memoranda are received). What this system does not tell the region is the precise dollar amount for which each individual violation report was settled, although inspectors can obtain this information.

Similarly, existing procedures adequately inform the regions about the reasons for any large scale termination of claims that occurs in negotiations. The Office of Chief Counsel occasionally sends enforcement bulletins and other memoranda to the regions indicating problems in report preparation that have been so common as to cause frequent terminations. Also, representatives of the Office of Safety headquarters staff are routinely included in settlement conferences, and often report back afterwards to the regions the reasons for a significant number of terminations. On occasion, regional staff participate in such conferences.

To go beyond these existing procedures does not seem justified, since the number of violations cited yearly is at least 9,000 and has exceeded 15,000 in some years.

III. The State Participation Program.

A. GAO Findings and Recommendations.

The draft report concludes that FRA's method for determining the number of state inspectors for which a state is entitled to reimbursement is based solely on track mileage and freight car volume, and does not consider other important factors. GAO also finds that FRA's evaluations of state programs focus only on financial aspects and inspection performance and ignore the degree of uniformity in state enforcement. Finally, the report states that FRA, in deploying its own inspectors, does not adequately consider changes in the level of state participation.

GAO makes the following recommendations concerning the State Participation Program:

1. Broaden the scope of the periodic assessments of the program to assess, among other things, the consistency or degree of uniformity in state enforcement.
2. Provide more consideration of changes in the level of state participation in deploying or redeploying Federal inspectors.
3. Develop a method of determining the reimbursable number of state inspectors that is based on factors such as the flow of hazardous materials, density of passenger and freight traffic, the number of accidents and causes.

B. Discussion.

This area may become moot under the President's budget for Fiscal Year 1983 since these grants to the states would be eliminated.

CONCLUSION

FRA's safety reauthorization must be passed upon by the Congress this year. The GAO audit will serve as a useful, if non-expert, component in the total equation. FRA will consider individual recommendations in the report with meticulous detail. In that regard, it compliments GAO on the thoroughness of its inquiry. Detailed responses will be made available to appropriate Committees of the Congress as part of the reauthorization process.

FRA does wish to comment on the "Cover Summary" attached to the draft report. Every level of interested staff and line involvement at FRA applauds and confirms the theme stated therein, that narrow and individual focuses are inimical to the ultimate goals of railroad safety. This agency is dedicated to the proposition that top management must be part of the process and that "parking meter" violations can be cited ad infinitum with no discernible salutary effect. Reorientation of the agency's efforts along the lines stated in the February 11, 1982 "Cover Summary" has been the thrust of the agency's efforts under its new stewardship. While reasonable men can differ on detail, FRA is gratified that its new efforts have been separately and independently concurred in.

- GAO notes:
1. GAO does not conclude that all three elements of FRA's safety program are ineffective. In fact, we (1) support the need for continuing the individual, routine inspections under certain specified circumstances (See p. 21), (2) believe there will be a continuing need for the civil penalty process (See p. 21), and (3) support the concept of State participation as a supplement to the Federal inspectors. While we acknowledge that rail safety has been good when compared with other modes of transportation, we believe the effectiveness of FRA's program can be improved. (See p. 3.)
 2. We believe the report appropriately recognizes that not all safety problems are systemwide and that routine inspections would be important in cases where railroads do not warrant assessments and under other circumstances. (See p. 21.)

AN EQUAL OPPORTUNITY EMPLOYER

**UNITED STATES
GENERAL ACCOUNTING OFFICE
WASHINGTON, D.C. 20548**

**OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE, \$300**

**POSTAGE AND FEES PAID
U. S. GENERAL ACCOUNTING OFFICE**



THIRD CLASS