Appendix E
RESPONSES TO RAILROAD SAFETY QUESTIONS

In the preparation of this report, OTA outlined a list of 33 issues and questions for consideration and discussion by the Assessment Advisory Panel. The issues raised were drawn from a review of the literature, various interviews, and contractor research efforts. As indicated to the panel, the issues would finally be narrowed down, and panel comments utilized as inputs for writing the final report.

As a result of outlining the initial 33 questions, the Railroad Labor Executives Association and the Association of American Railroads (AAR), each with members on the Advisory Panel, prepared extensive responses to the questions raised by OTA. The responses of each group were considered before writing the Issues and Alternatives section to this report. Because of the merit of each group's responses to the questions as well as the time and effort taken in the preparation of their responses, this appendix includes the full list of questions raised by OTA and the responses prepared by the two interest groups. It should be noted that individual railroads and labor organizations may or may not agree in full with the positions taken by their executive or lobbying organizations.

In formulating the issues finally selected for the major section of the OTA report, the railroad safety assessment team reviewed and condensed the list of issues initially outlined. The following is the list of questions initially raised by the OTA staff.

RAILROAD SAFETY ASSESSMENT ISSUES

1. Should safety be explicitly defined in legislative and regulatory policy or should safety be defined in general terms?
2. Should railroad safety legislation be general in order to permit Government regulatory and programmatic flexibility or should it be specifically designed to address particular safety problems or concerns?
3. Should labor-management relations and collective-bargaining questions be considered when legislating safety or should safety questions only be dealt with in such processes?
4. How should other criteria such as economic, environmental and consumer considerations be taken into account when legislating or regulating safety?
5. How should safety legislation include measures to evaluate its effectiveness?
6. Should older safety statutes (including Safety Appliances Act, Ash Pan Act, Locomotive Inspection Act, Power Brake law, etc.) be repealed in whole or in part, be modified and revised for incorporation into omnibus safety legislation, or should the laws remain as they are?
7. Should the Occupational Safety and Health Administration (OSHA) continue to handle the occupational safety and health aspects of railroad maintenance shops or should all occupational safety and health for railroads be assumed by the Federal Railroad Administration (FRA)?
8. Should Congress follow safety legislative examples it has set for other transportation modes or should railroads continue to be treated uniquely in future safety legislation?
9. Should Congress consider safety policy as a part of future railroad regulatory reform legislation or should Congress consider safety policy separately?
10. Should Congress consider safety policy as a part of any future railroad economic

assistance policy or should safety be considered separately?

11. Should the Government role in railroad safety be clarified and/or expanded or should clarification and increased responsibility for safety be handled by railroad carriers, suppliers, and labor with Government policy directed strictly toward public concerns (e.g., hazardous materials and railroad grade-crossings)?

12. Should Federal Government policy continue to preempt State regulatory enforcement authority or should State authority be expanded?

13. Should the State Participation Inspection Program, authorized by the 1970 Act, be repealed, revised, or maintained in its current form?

14. Should the criteria and procedures for data collection be revised or should the current system be maintained?

15. Should procedures used in analyzing accident and incident data be revised and a standard set of analyses be conducted or should the current system remain unchanged?

16. How should the safety considerations versus collective bargaining considerations of the Hours of Service law be determined or is the current relationship of hours of service to safety accurately defined for purposes of compliance?

17. Should safety standards related to employee age, qualifications, and training be set or does the current regulatory system adequately address these human factors considerations in safety?

18. Should specific criteria and research data be a mandatory part of the rulemaking process or is the current system adequate?

19. Should the Federal inspection program be directed toward monitoring carrier performance records with quantitative and descriptive goals, should the current system directed toward inspecting design compliance be continued, or is some combination of the two appropriate?

20. Should Federal inspectors be required and trained to inspect a range of technologies and operating practices or should inspectors be required and trained for specific railroad equipment inspection?

21. Should (participating) State inspectors be qualified and paid according to Federal standards or should States establish their own inspector qualifications and pay scales?

22. Should attempted Federal improvement of railroad safety be directed to a system of enforcement and penalties, or through incentive measures for carrier and employees, or is some combination of the two appropriate?

23. Assuming deferred maintenance correlates with decreased safety, should the Federal Government monitor equipment- and track-maintenance programs, should it rely on existing safety standards, or should it revise standards to mandate safety maintenance?

24. Should Government responsibility in closing potentially unsafe plants or operations be based solely on safety considerations or should economic considerations also be taken into account?

25. Should Government safety policy for railroads in extreme financial trouble differ from Government safety policy toward other carriers or should all carriers' safety be considered uniformly?

26. Should the Federal Government require an expanded safety cost-reporting system or does the existing system provide adequate safety cost information and definition?

27. Under what circumstances should railroads be mandated to carry hazardous materials or should they have the right to establish the safety conditions by which such materials are carried?

28. Should safety certification standards be adopted for railroad equipment or is the current system of quality control adequate?
29. Should an established set of priorities for rulemaking be determined-based on analysis of existing accident and incident data and available research, or is the current method of selecting rules appropriate?
30. How should priorities be established for research and development?
31. Should research, development, dissemination, and implementation of new technology which would increase safety take into account existing collective bargaining and economic factors or should such technologies preclude those considerations?
32. As research identifies technological or other practices which may impact safety, how should these considerations be weighted against other policies such as economic, environmental, or collective-bargaining factors or should such findings be considered separate?
33. To what extent should near-term safety benefits be considered in lieu of long-term economic and/or other long-term safety policies?

ASSOCIATION OF AMERICAN RAILROAD RESPONSES

Railroad Safety Issues

The Office of Technology Assessment has prepared an outline/list in which it identifies 33 railroad safety issues. The fact that most of the issues have been expressed as disjunctive questions, together with the extremely broad implications presented in each part of the issues **as** stated, has made response very difficult—so difficult, in fact, that answers ranging from "yes or no" to doctoral dissertations have been suggested as equally adequate.

Despite these problems, the Association of American Railroads has attempted to provide a response to each of the matters in OTA's "Issues Outline. "

1. **Should safety be explicitly defined in legislative and regulatory policy or should safety be defined in general terms?**
2. **Should railroad safety legislation be general in order to permit Government regulatory and programmatic flexibility or should it be specifically designed to address particular safety problems or concerns?**

Safety legislation should be general. Safety regulations should be specific, but subject to constant review based on performance and the causal reasons for any poor performance.

In general the fewer regulations and the less enforcement the better, *consistent with safety performance*.

The essential feature of any safety regulatory program is that it be responsive to changes in technology, in operating practices, and in economic circumstances; and, above all, that it be responsive to changes in performance. Legislation which engraves in stone specific standards or requirements (as, for example, the Railroad Safety Act of 1976) cannot meet these requirements to be responsive.

(It is worth noting that the forthcoming DOT report to Congress under Sections 504 and 901 of the Railroad Revitalization and Regulatory Reform Act will identify the inability of railroads to respond to change as the root cause of the industry's problems. The inflexible Federal program of safety regulation has contributed to that state of affairs.)

3. **Should labor-management relations and collective-bargaining questions be considered when legislating safety or should safety questions only be dealt with in such processes?**

An answer cannot be provided that would be appropriate in all circumstances. However, the following observations are relevant:

First, it is undeniably true that in the railroad industry many issues are considered in the legislative forum—generally at the insistence of labor organizations—that in other industries would be dealt with at the collective bargaining table. The so-called "full crew laws" are typical examples. Those laws were ostensibly based on safety considerations, but they were repealed without union objection in the wake of a collective bargaining settlement of the fireman manning issue. In other industries, the size ,of the work force is, by and large, a matter committed elusively to collective bargaining.

Second, there is much to be said for settling as many of these issues through collective bargaining as possible. The parties are intimately aware of the relevant facts—much more aware than outsiders can ever be. And if the issues are settled in collective bargaining, the economic consequences of possible alternative courses of action are likely to be carefully weighed by both parties.

Third, the Government, accordingly, should refrain from intruding into an area appropriately reserved to collective bargaining unless the safety considerations are clear and compelling.

Fourth, where the Government is obliged to intervene, it should be prepared also to take whatever steps are necessary to resolve in a fair fashion other collective bargaining issues directly related to the safety issue. For example, legislation has been proposed setting a limit to the length of trains. The railroads do not believe any sound case can be made for such legislation on safety grounds. But were the Congress to conclude otherwise, then the Congress should at the same time consider the related collective bargaining issues. One of the main reasons for the operation of long trains is the labor costs associated with the size of crews. The railroads have attempted to reduce crew size since 1959. Every independent panel that has examined the issue has concluded that the railroads are correct. If the collective bargaining process proves unable to resolve this issue, then Congress could not fairly mandate the length of trains without establishing the procedures necessary to settle the directly related issue of crew size. The same sort of approach would be necessary with respect, for example, to proposed legislation further restricting hours of service of operating employees. In other industries, by and large, this is a matter for negotiations. If this issue were to be lifted once again from the bargaining process, then so too should be the issue of the method of pay for operating employees, most of whom are still paid, not by the hour, but by the mile, with 100 miles equalling 8 hours' pay—the consequence being that employees on long runs often make several days' pay in less than 8 hours.

4. **How should other criteria such as economic, environmental, and consumer considerations be taken into account when legislating or regulating safety?**

Safety legislation should explicitly recognize that economics will necessarily impose constraints on any program aimed at improving safety, as will environmental considerations.

The impacts of all these criteria should be determined by the regulatory agency charged with implementing a safety statute in order to allow an informed balancing of competing interests and of competing national policies. Legislation and regulations for the evaluation of economic and environmental considerations already exist and further specific provisions are not necessary.

As for "consumer" interests, they are best represented by ensuring that the consumer gets rail transportation (in this case) at the lowest possible cost consistent with other policy goals.

Safety regulation should be designed to produce the maximum improvement in safety for the minimum dollars of expense.

5. How should safety legislation include measures to evaluate its effectiveness?

At the **present** time there is no need for additional legislation on railroad safety. The broad, sweeping authority granted the Secretary of Transportation in the **1970** Federal Railroad Safety Act, to issue rules, regulations, and standards as necessary for *all areas of railroad safety,* is sufficient to permit him to take such action as is essential to improve the safety of railroad workers and the public.

In the past, Congress has too often been too specific in the statutes which have been enacted. This inhibits changes which are necessary due to the application of advancing technology or improved operating practices and, through inertia, many unnecessary statutes remain on the books.

The regulatory authority now possessed by the Secretary should be exercised only when accident experience clearly reveals that preventive measures are necessary, and that, in the absence of regulations, no improvement will be effected. Regulations should not be issued on the basis of one or two isolated incidents, but only when a continuing and increasing pattern is revealed by careful review of records and practices.

Results of the imposition of regulations should be reviewed on an annual basis; if the accident experience has not been reduced over time, consideration must be given to the repeal or amendment of the regulation and the substitution of alternate measures.

6. Should older safety statutes (including the Safety Appliances Act, Ash Pan Act, Locomotive Inspection Act, Power Brake law, etc.) be repealed in whole or in part, be modified and revised for incorporation into omnibus safety legislation, or should the laws remain as they are?

The older safety statutes (those which preceded the 1970 Safety Act) were enacted during an era in which no Federal agency had broad authority to issue safety regulations. Each such statute was designed to meet a specifically identified need. The needs have changed, but the statutes haven't and the DOT should be urged to convert the still-necessary old statutes (e.g., the Locomotive Inspection Act and the Power Brake law) into meaningful, new regulations and to request repeal of those laws and of the ones for which no current regulatory mandates (e. g., the Ash Pan Act) are needed.

7. Should OSHA continue to handle the occupational safety and health aspects of railroad maintenance shops or should all occupational safety and health for railroads be assumed by FRA?

In the Federal Railroad Safety Act of 1970, Congress granted to the Secretary of Transportation authority to issue rules, regulations, and standards as necessary for all areas of railroad safety. The Act also contained provision for preemption of State regulations covering the same subject matter. It is obvious that Congress believed that regulations should be standardized throughout the Nation, with exception of unique localized situations less than statewide in character, and that the FRA (through delegation from the Secretary) should be the governmental body directly responsible for the development, issuance, and enforcement of those regulations and standards which were deemed essential.

While the **1970** Railroad Safety Act was under consideration by Congress, the Occupational Safety and Health Act was being acted upon by other committees in both houses. Had the Commerce Committees, working on the Railroad Act, believed the Department of Labor should have authority to establish safety regulations applicable to all or part of the railroad industry, the blanket authority would not have been granted the Secretary of Transportation. The OSH Act covered all industries in general, but contained the provision that it was not applicable to any industry regulated by another Federal agency which was exercising its authority to establish and enforce safety standards. The question framed by OTA, thus, misconstrues the law. FRA **has** jurisdiction over railroad occupational safety and health, and litigation has ensued over whether that authority is being "exercised. " The railroads firmly believe that an industry should be responsible in safety matters to

only one Federal agency and, because DOT is the agency with the broadest powers, it should be the all-inclusive, safety regulator for the railroad industry.

8. Should Congress follow safety legislation examples it has set for other transportation modes or should railroads continue to be treated uniquely in future safety legislation?

By posing the question in this form, OTA may have, without realizing it, recognized the discriminatory "super-attention" paid to the railroad industry by Congress. A half century and longer ago, when railroads were the heavily predominant means of transporting people and goods and there was no Federal agency with overall responsibility for railroad safety. There may have been justification for Congress to enact specific rail safety legislation. That need, if it once existed, has since passed. In 1970, with the passage of the Federal Railroad Safety Act, Congress saw fit to provide the Secretary of Transportation with broad authority for actions to improve safety. Thereafter, Congress should have limited its consideration of railroad safety to oversight hearings to determine how the Secretary was exercising this jurisdiction. Congress should have refused to consider legislation proposing specific rail safety measures (or other proposals under the guise of safety) but the consideration continues unslackened.

The Federal Railroad Safety Authorization Act of 1976 contained amendments to the Hours of Service Act mandating requirements for crew quarters and it contained amendments to the 1970 Safety Act requiring "highly visible" rear markers and revised blue flag rules. None of these three specific pieces of statutory enactment—and they are but examples—was justified by hard evidence, dispassionately weighed, but that is beside the main point of this discussion. Where in the oversight of the activities of the Bureau of Motor Carrier Safety is there a parallel? In reviewing the statutory implementations of the National Highway Traffic Safety Administration, is there a pattern similar to that which exists between Congress and the FRA? (The ignition interlock fiasco is an example of the reverse kind of oversight.) Only one item of congressionally required equipment for another mode comes to mind—the emergency locator transmitter (ELT) required for aircraft—and the general consensus now on that device is that it should have had some more development time; that it has probably been about as much of a source of trouble as it has been a source of help.

Congress should drastically change its policy of attempting to pass specific legislation aimed at narrowly focused problems; history shows that broad-scale requirements, whether legislative or regulatory, based on "single incident" statistics have a poor record of achievement and the best results (e.g., the clean cab project) seem to flow from the cooperative participation—perhaps in a nonmandatory forum—of all interested parties in seeking to achieve an agreed upon common goal.

9. **Should Congress consider safety policy as a part of future railroad regulatory reform legislation or should Congress consider safety policy separately?**

While fewer economic regulations *may* result in a more healthy and thus safer industry, rail safety should not be an explicit goal of regulatory reform legislation. Safety problems are a very indirect function of economic regulation, thus economic regulatory reform legislation need not concern itself with safety as such.

10. **Should Congress consider safety policy as a part of any future railroad economic assistance policy or should safety be considered separately?**

Involving economic assistance with safety policy would only add another layer of confusion to an already confused subject. The present programs of Federal financial assistance to railroads are intended as only interim measures and safety policy should not be tied up with temporary programs. If railroads are in business at all, they can and should pay for their own safety programs; the more reasonable (from a

cost/benefit standpoint) the programs engendered by regulatory schemes, the better the rail carriers will be able to afford them. Of course, where public facilities and operations are involved, such as at highway grade-crossings, public money should also be involved but this is more a matter of the correct allocation of cost than it is of economic "assistance. "

11. **Should the Government role in railroad safety be clarified and/or expanded or should clarification and increased responsibility for safety be handled by railroad carriers, suppliers, and labor with Government poIicy direct strictly toward public concern (e.g., hazardous materials and railroad grade-crossings)?**

Railroad managers recognize and accept the responsibility for conducting company operations in a manner which will pose no threat to the safety of their employees and the public; though the responsibility of the railroads is obvious, Government and labor also have roles in the promotion of safety.

In the 1970 Act, Congress defined the areas in which the Secretary of Transportation should participate and railroad management believes that Federal activity should go far beyond the mere issuance of regulations. Regulations have a relatively limited impact in solving safety problems while much more could be accomplished by attacking the root causes of accidents through research, development, testing, and training.

The railroad labor unions could contribute toward improving safety by joining management in cooperative programs and by calling upon their members to give greater attention to safety than is presently done. Instead of constantly criticizing management and instead of trooping before Congress and the regulatory agencies with pleas for the enactment of more legislation and the issuance of more regulations, they should work with the carriers in efforts to reduce hazards and thus to provide a safer environment for their members.

12. **Should Federal Government policy continue to preempt State regulatory enforcement authority or should State authority be expanded?**

Federal governmental policy—at least as it operates through FRA-does not preempt State regulatory enforcement authority. FRA has a rather detailed regulatory scheme under which States may become certified to carry out and assist in enforcement of many railroad safety regulations.

In terms of the regulations themselves, AAR believes that they must be nationally uniform—except to account for particular local circumstances. Railroads are a national industry and railroad equipment must be able to operate freely in all parts of the country. The congressional and judicial policy for national uniformity is sound and should be continued.

13. **Should the State Participation Inspection Program, authorized by the 1970 Act, be repealed, revised, or maintained in its current form?**

The major problem with the State Participation Inspection Program is the constant need to ensure that State-employed inspectors meet Federal qualifications.

14. **Should the criteria and procedures for data collection be revised, or should the current system be maintained?**

15. **Should procedures used in analyzing accident and incident data be revised and a standard set of analyses be conducted or should the current system remain unchanged?**

Issues 14 and 15 will be addressed jointly, since data analysis procedures could affect the criteria and procedures for data collection.

The AAR and the railroad industry have been unable to detect any evidence of systematic, comprehensive accident/incident data analysis by the Federal Government. The industry would encourage and support such analysis. Thus, it is urged that procedures for analyzing these data

be established and analyses be conducted to provide guidance for the formulation of safety research and action programs and for monitoring the effectiveness of these programs once implemented.

An objective of FRA data collection and analysis should be to monitor trends and to assist the industry with the identification and priorities of existing and potential safety problems. This data collection and analysis at the industry level should not attempt to pinpoint the specific nature of each safety problem or to support in-depth analysis. Once the industry-level system identifies potential problems that appear significant, appropriate action could include notification of railroad representatives and recommendations for corrective action. In some cases, special studies may be appropriate, requiring the collection and analysis of detailed data at the individual carrier level to more accurately determine such factors as accident frequency, severity, and specific causes. These data could then be analyzed to determine whether the problem deserves a high priority and, if so, the kinds of research or action that may be required.

The current FRA criteria and procedures for data collection are adequate to monitor trends and provide indications of potential problem areas which may require more detailed investigation. To substantially enlarge the present FRA data-reporting requirements in an attempt problems would result in an expensive and cumbersome system which would place an unjustifiable burden on the railroad industry, especially in light of the lack of analysis of the data now being collected. Further, the determination of the data reporting requirements for such an expanded system would require anticipation of all potentially significant safety problems as well as the detailed data necessary for their in-depth analysis.

AAR's members believe that the current FRA safety data system is sufficient for its intended and justifiable purpose. FRA should be urged to develop a systematic approach to the anlaysis of the data available through this system to assist the industry in the identification of significant safety problems.

16. **How should the safety considerations versus collective bargaining considerations of the Hours of Service law be determined or is the current relationship of hours of service to safety accurately determined for purposes of compliance?**

Safety is a legitimate concern of Congress; collective bargaining—other than guaranteeing its free availability—is not. Governmental "consideration" of substantive collective bargaining issues must or could lead to the Government "taking sides" in the collective-bargaining process and that would be neither fair nor proper. It would, in fact, destroy the system.

17. **Should safety standards related to employee age, qualifications, and training be set or does the current regulatory system adequately address these human factors considerations in safety?**

It is fairly well settled that the age of an employee is not a proper subject for regulation. What is significant is the ability of the employee to perform safely the tasks required in his or her occupation.

Virtually without exception, the railroads have each established physical qualifications for their employees. The qualification standards, and the railroads' various requirements about periodic physical examinations, are not uniform throughout the industry; this is only natural, given the fact that they were not developed as a joint effort. Equal employment opportunity guidelines and Federal regulations requiring that Government contractors (including railroads) hire physically handicapped individuals are a fact of life and, because of them, rail carriers are experiencing great difficulty in defending their physical qualifications standards. Several, in fact, have been forced to accept into employment individuals whom the medical officers believe are not physically qualified. AAR's members want to avoid hiring persons who are poor safety risks and they believe that adoption by FRA of minimum standards for employees

will be of great assistance; each of the other modal regulatory units within DOT has established regulations of this type: the FAA for flight crews, the BMCS for over-the-road truckers and the Coast Guard for maritime personnel and the 1970 Act specifically authorizes the Secretary to act in this matter.

FRA also has the authority to conduct training and could be of assistance to the industry in the promotion of safety training programs and in studies which would demonstrate the manner in which employees could be motivated to perform more safely.

Regulations governing training are not necessary at this time.

18. **Should specific criteria and research data be a mandatory part of the rulemaking process or is the current system adequate?**

In terms of assessing the environmental and inflationary impacts of proposed regulations, the system is designed to be adequate but seldom functions that way. Impact assessments, when made, are often perfunctory and inaccurate and, when missing, their lack has been justified on an inadequate basis. The assessment of research data is not a requirement and is only very rarely done.

The result of this process is the formulation of regulations based on single-incident statistics (using the Decatur, 111., accident as a basis for establishing new crew quarters regulations; using the Chicago commuter train tragedy as a basis for writing legislation on rear end markers) or the writing of mandatory standards based on the theoretical calculations of governmental engineers (the requirement for a larger tank car head shield than had ever been tested in actual service) or the failure to draft regulations when supported by data developed in railroad industry research projects (the long-standing [and, as yet, incompletely resolved] refusal to require top and bottom shelf couplers on certain pressurized, uninsulated tank cars despite overwhelming research data in their favor). Another aspect of the failure to assess research and accident data is the transferal of industry standards and guidelines from their intended purpose into inappropriate areas (the adoption of the good maintenance practices of the AAR Interchange Rules by FRA **and their reincarnation as Federal mandatory safety limits; the change** in the rear marker from **a** railroad designation of the end of a train into a device to increase conspicuity and, allegedly, to reduce rear end collisions).

In all of these instances, and in others (such as the creation of Federal blue flag rules in potential conflict with earlier Federal rules relating *to* yard speeds and to rear end flagging a full the purpose of a regulation would surely have resulted in better safety standards for the railroad industry.

19. **Should the Federal inspection program be directed toward monitoring carrier performance records with quantitative and descriptive goals, should the current system directed toward inspecting design compliance be continued, or is some combination of the two appropriate?**

Since its inception, the FRA safety program has been directed toward enforcing compliance with track and equipment standards. These track and equipment standards are essentially those used by the railroad industry for many years; the FRA did not develop a new set of standards, but merely cast into regulations the design standards which the railroads had already developed. In promulgating these regulations, FRA has not addressed the following questions: 1) have circumstances developed for which these previously developed recommended standards are no longer appropriate? 2) are these recommended industry standards not generally being observed by the industry; if so, has that resulted in additional track and equipment-related accidents and has that created a safety problem? 3) were the industry standards ever intended as absolute rules, or as merely recommendations of good—or of financially justifiable—practices? and 4) was there real evidence of widespread "violations" of the industry standards in the first place, such as would make Federal adoption justified?

20. **Should Federal inspectors be required and trained to inspect a range of technologies and operating practices or should inspectors be required and trained for specific railroad equipment inspection?**

While it might be possible to train some individuals to inspect track, equipment, and signals it would not be cost-effective nor would it be possible in all cases. It certainly would be unrealistic to expect a Federal inspector to understand the intricacies of electrical circuits, on one hand, and, at the same time, be able to interpret a series of super-elevation and horizontal track-alignment data.

The railroad industry specializes its forces to a large extent and experience has shown that, for instance, maintenance-of-way and structures personnel require skilled knowledge that is different from that required of those who maintain locomotives, or rolling stock, or communications and signals equipment. Only rarely, and then usually at middle- to upper-management levels, do these employees develop proficiency in more than one of these fields. The railroads do not believe that Federal or State employees who may be experienced in one of the disciplines could attain the necessary qualifications in another through a training program of limited length. Judgment is required in each of these skilled positions and judgment can only be developed through experience.

There are some inspection activities which can be performed by persons who do not possess highly technical backgrounds or who have not worked in technical fields, but who do have knowledge of and experience in railroad operations. For instance, inspections for compliance with federally prescribed operating rules could be coupled with inspections for hours-of-service compliance, or accident-reporting, or perhaps with hazardous materials regulations. (This latter area is, however, becoming more complex with each passing month and no doubt either does or soon will require at least some degree of specialization.)

Very little could be as bad for a program of inspection as an incompetent, or under-trained, or unskilled force of inspectors.

21. **Should (participating) State inspectors be qualified and paid according to Federal standards or should States establish their own inspector qualifications and pay scales?**

If the States insist upon a role in inspecting for compliance with Federal railroad safety regulations, and in enforcing such regulations, the partnership arrangement as provided for in the 1970 Federal Railroad Safety Act should be maintained.

The railroads are deeply concerned about the qualifications of inspectors, Federal or State. They regard the standards established by the FRA for track and freight car inspectors as reasonable and realistic, requiring, as they do, experience in the railroad industry, with professional technical training substituting to some extent for part of the experience requirement. In the opinion of the railroads, State inspectors should possess equal qualifications because the authority given inspectors, if not prudently exercised, could seriously impair the efficiency of railroad operations.

Difficulties experienced by States in attempting to recruit qualified personnel for inspector positions are recognized. The problems of salary and benefit differences between the State and Federal scales must be resolved between the State and Federal agencies; the industry insists only that qualification standards established by FRA must be maintained, and not compromised for the State inspectors.

22. **Should attempted Federal improvement of railroad safety be directed to a system of enforcement and penalties, or through incentive measures for carrier and employees, or is some combination of the two appropriate?**

Safety cannot be achieved through the enactment of legislation or the issuance of regulations with penalties assessed for noncompliance. Improvements in safety performance can be accomplished only through the united efforts of

people at all levels of responsibility who are well-qualified, well-trained, and motivated to perform their duties in a manner that will limit the opportunity for accidents to occur.

Congress has given the Secretary of Transportation far-reaching authority to conduct activities to improve railroad safety. While this authority includes the power to issue regulations and mandatory standards, it also carries the duty to use care in exercising the authority. Too many regulations are issued without full or proper justification and, in all too many instances, they do not provide a solution.

Maintaining strict compliance with each minor provision of a comprehensive set of standards is a virtually impossible task. Many citations are issued for technical violations of a minor nature, and penalties are assessed. This is counter-productive because it siphons off resources and channels them into areas that may not represent the most pressing problems on a particular property. If a true safety problem exists and the railroad is aware of it and makes no effort to correct it, then perhaps penalties are justified. However, attempts by a Federal agency to bring a carrier to its knees through citations and fines for minor deviations from published standards will do nothing to improve safety and will begin to create disrespect for the law in general and for the regulations of that agency in particular.

The 1970 Act authorizes the Secretary to "conduct, if necessary, research, development, testing, evaluation, and training for all areas of railroad safety." Many of the funds devoted to the development and enforcement of regulations could better be expended in these areas. Through cooperative programs between DOT, carrier management, and the labor organizations, greater strides could be taken toward the improvement of the industry's safety performance.

23. **Assuming deferred maintenance correlates with decreased safety, should the Federal Government monitor equipment- and track-maintenance programs, should it rely on existing safety standards, or should it revise standards to mandate safety maintenance?**

The assumption is not justified. Deferred maintenance is a rather vague and most often loosely used term. Its most precise and best meaning refers to a maintenance state in which the average age of the components in a system exceeds half the expected life of those components. This is a statistical and economic concept and not *one* which can be used to pinpoint dangerous areas or even, except in a broad sense, to assign priorities for maintenance activities. For example, it is quite possible to have unsafe conditions in track which has virtually all new components while, at the same time, a section of track with statistically defined deferred maintenance can be far superior in terms of safety and rideability.

Decisions concerning the scheduling and programming of maintenance are largely decisions of engineering economics. They require an extensive background knowledge of traffic flows, labor rates, labor productivity, equipment and material prices and availability and a host of other factors of which Government representatives have no knowledge and to which they have no legitimate access. These decisions also carry with them a measure of responsibility. The employee in charge, bluntly, may lose his job if wrong decisions are made. Failure to make the right decisions can cost lives, jobs, and property damage—facts of which railroad management is acutely aware. Governmental representatives may be aware of the consequences of wrong decisions in this area but they are insulated from the responsibility for them in such a way that they should not attempt to substitute their necessarily more remote judgment, before the fact, for that of those who are, and should be, in charge.

24. **Should Government responsibility in closing potentially unsafe plants or operations be based solely on safety considerations or should economic considerations also be taken into account?**

25. **Should Government safety policy for railroads in extreme financial trouble differ from Government safety policy toward other carriers or should all carriers' safety be considered uniformly?**

The closing of operations (taking equipment or trackage out of service) or the imposition of maximum speed restrictions can only realistically be done on technical grounds. Introduction of economic considerations would clothe Federal inspectors with judgmental prerogatives which properly belong to railroad management and which are based on background information to which only they are privy. Economic considerations, on the other hand, do have a legitimate role to play in determining kinds of inspections, frequency of inspections, timing, locations, and the like.

If inspection criteria are set technically, as they should be, the financial health of the carrier should not and will not have any bearing on questions of serviceability. Management decisions about restoration of service or the methods used to meet minimum standards or the extent to which minimum standards are exceeded will vary, depending on financial strength, but these are questions separate and distinct from compliance with properly established minimum standards of safety.

26. Should the Federal Government require **an** expanded **safety cost-reporting system or does the existing system provide adequate safety cost information and definition?**

The only justification for requiring the reporting of any additional safety cost data would be to help estimate the priorities, costs, and effectiveness of current and proposed safety research and action programs. The industry is unaware of any priority or cost-effectiveness estimates which are currently available or in use by the Federal Government; nor is it aware of any efforts underway to develop techniques to provide such estimates. Railroads would support the development and use of a cost-effectiveness methodology with which to evaluate current and proposed safety programs and regulations; however, any expanded safety-cost reporting should not be required until such methodology is fully developed and the costs of its data requirements defined and justified.

27. **Under what circumstances should railroads be mandated to carry hazardous materials or should they have the right to establish the safety conditions by which such materials are carried?**

The facts are that railroads are required, as part and parcel of their common carrier duties, to carry hazardous materials and to carry them under conditions established by other entities. The recent Interstate Commerce Commission decisions requiring the transportation of spent nuclear materials, the failure of FRA, for years, to even allow the installation of shelf couplers on modern tank cars and the scant cooperation received from the Materials Transportation Bureau in the recent revision of the hazardous materials regulations are but examples of the atmosphere within which these materials are carried by the railroads. Despite this, their safety record is superb.

What is needed in this area is a little more attention paid to those who know how to accomplish the job and a little less paid to those who are alarmed by the fact that it is being done at all.

28. **Should safety certification standards be adopted for railroad equipment or is the current system of quality control adequate?**

Under no circumstances should safety certification standards be adopted for railroad equipment. The railroad industry, through its AAR Committees, provides adequate control of railroad equipment and the components authorized for use on cars in the interchange fleet.

The various technical committees are composed of industry experts from 1s to **20** major freight car owners, in the particular area of the committee's responsibility. The committee members consult with related experts from component manufacturers. There is no way the

Government bureaucracy could assemble such broad-based expertise to respond in a timely fashion to technical progress in the various areas offreight car components.

The industry system of initial review and comments from committee members, subsequent laboratory testing and, finally, limited testing in the field, utilizing actual railroad environment, has provided adequate quality control. At any stage in the current system of introducing improved components or monitoring components previously approved, there is evidence that the industry is capable of responding promptly and effectively.

29. Should an established set of priorities for rulemaking be determined-based on analysis of existing accident and incident data and available research, or is the current method of selecting rules appropriate?

30. How should priorities be established for research and development?

The problems and approaches which apply to the establishment of rulemaking priorities are closely allied with establishment of research and development priorities, so issues 29 and 30 are addressed jointly.

Analysis of available accident and research data constitute necessary, but not sufficient, ingredients for the establishment of priorities; at present, there is every indication that this process, especially its rulemaking side, derives primarily from the pressure from special interest groups, the subjective perceptions and appraisals of DOT (FRA) staff members, and the recommendations of the NTSB. All three of these sources suffer from the same basic deficiency: They are unable to take proper account of the total spectrum of railroad safety issues. NTSB recommendations, for example, are biased because they are based on investigations of high-severity accidents. Preliminary analysis by AAR shows that the criteria used by NTSB to determine which accidents to investigate renders these accidents unrepresentative of significant rail safety issues and, therefore, not useable in the setting of safety research and action priorities.

Given the limited dollar and manpower resources available for safety research and for the formulation, implementation, and enforcement of safety rules by FRA and the rail industry, it is essential that safety priorities be established with utmost care. Recent analysis of all FRA accident and employee casualty data by the AAR revealed that too much emphasis and too many resources have been focused on train accidents caused by track and equipment failures, whereas the more frequent and serious accidents were employee casualties which had no relation to failure of track or equipment.

The focusing of FRA's emphasis towards the elimination of human factors accidents will not be as politically dramatic as the establishment of standards for tracks or of safety rules for freight cars, but it will, if it is successful, save more lives. A reordering of priorities away from collecting large fines for small technical violations—who, for instance, has ever been killed by a late-filed railroad accident report?—will cause FRA to feel enormous pressure from interests who know full well how to make their pressure felt, but the courage to go against what seems to be the popular wisdom is a necessary ingredient for one who seeks a solution rather than an arena.

The problem is all the more difficult by the very nature of its subject. It is comparatively easy to realize, for instance, that certain indications on a wheel—e.g., shelled tread, cracked or broken flange, etc.—could lead to premature failure and thus to write rules outlawing car wheels with these characteristics. It is a quantum leap upward in difficulty to identify the early warning signs of impending human failure. What is there about an engineer which is analogous to a cracked, broken, or missing flange? How does a switchman show the kind of warning that a series of missing tie-plates do? The answers to these questions are as difficult *as* they are important and the sooner all interested parties get about answering them, the sooner there will be answers. Congress could help by encouraging the search instead of misdirecting

the effort off towards the quest for a perfect rear end marker; but that, too, will take both the courage and the convictions of statesmen.

31. **Should research, development, dissemination, and implementation of new technology which would increase safety take into account existing collective bargaining and economic factors or should such technologies preclude those considerations?**

From previous answers, it should be obvious that the railroad industry believes that Congress should not involve itself in the substance of the collective-bargaining process and that research and the development of new technologies should never be circumscribed by existing collective-bargaining agreements.

32. **As research identifies technological or other practices which may impact safety, how should these considerations be weighted against other policies such as economic, environmental, or collective bargaining factors or should such findings be considered separately?**

If research efforts identify an opportunity to improve safety, the restraints of practicality demand an assessment of its costs and benefits and of its impacts on other priorities and programs, including the agreements arrived at in collective bargaining. If there are advantages in all of these factors, then obviously the findings of research should be immediately applied. If there is a serious question as to the cost-effectiveness of the safety approach, measure, or practice derived from research, then great care must be taken so as not to mandate ever-increasing costs in the search of the ultimate will-o' -the-wisp: a total lack of accidents.

There is some hazard in every aspect of life. It is the object of safety research to attempt to reduce that hazard. But if the cost of implementation becomes prohibitive, then some alternate means of providing the service or carrying out the function will be found. At present, as a consequence of safety research on tank cars, very substantial expenses are being incurred for improvements, and this means that the rates for the movement of hazardous materials in tank cars will certainly increase. Railroad safety will increase. However, the movement of these products by other modes (encouraged, perhaps by the newly created rate disparities) may well lead to more accidents, because the other modes are not now required to pursue the safety measures that the railroads are required to follow. From a national point of view, therefore, action to increase safety in one mode may decrease overall national safety. This is an issue which has not yet received the attention it deserves.

33. **To what extent should near-term safety benefits be considered in lieu of long-term economic and/or other long-term safety policies?**

Near-term safety benefits which, because of their costs, affect long-term industry economic viability must be viewed with great caution. Total railroad safety can always be ensured by shutting the railroads down or by driving them out of business. That is clearly not in order as a matter of public policy.

As a matter of practicality, it need not happen if costs and benefits are intelligently considered and weighed and if implementation of alleged "benefits" is limited to those with positive cost/benefit ratios.

RAILROAD LABOR EXECUTIVE ASSOCIATION RESPONSES

2. Should railroad safety legislation be general in order to permit Government regulatory and programmatic flexibility or should it be specifically designed to address particular safety problems or concerns?

Federal railroad safety legislation should be specifically designed to address particular safety problems and concerns. The most far-reaching Federal legislation concerning railroad safety has been general rather than specific. The enactments by Congress of the Safety Appliances Act in the early **1900's were designed to correct specific problems** where the railroads had failed to self-regulate. Even as late as **1970,** only 5 percent of the causes of accidents were covered by Federal laws. Continued deterioration in the safety picture led Congress to conclude that the railroads would not, or could not, control the increases in injuries or accidents without Federal supervision. The Federal Railroad Safety Act of 1970 delegated authority to the FRA to regulate all areas of railroad safety. Although the FRA has the broad authority to regulate and to promote railroad safety, it has failed to do so.

The FRA's abdication of its responsibilities forced Congress to enact some specific safety standards under the Federal Railroad Safety Authorization Acts of **1974** and 1976. Referring to the need for legislating the specific safety requirements contained in the Federal Railroad Safety Authorization Act of 1976, the Senate Committee on Commerce stated:

> The inability of the Federal Railroad Administration and the Nation's railroads to make major safety gains continues to be a source of great frustration to the Committee. . . Many of the amendments contained in S. 3119 could be accomplished under the existing regulatory powers of the FRA. Petitions regarding many of the matters contained in the amendments have been filed with the FRA but it has not responded to the petitions in a timely manner.
>
> * * * * *
>
> These amendments appear to be more appropriate for administrative rather than legislative action. However, if the agency which is responsible for implementing the Federal Railroad Safety Act is going to be unresponsive to public petitions for rulemaking, the Congress may be forced to act. S. Rep. No. 94-855, 94th Cong., 2d Sess. 2-3 (1976).

The FRA's record has not improved since the enactment of the 1970 Act. Thus, Congress must fill the vacuum created by the FRA by enacting legislation to remedy specific railroad safety problems.

3. **Should labor-management relations and collective-bargaining questions be considered when legislating safety or should safety questions only be dealt with in such processes?**

17. **Should safety standards related to employee age, qualifications, and training be set or does the current regulatory system adequately address these human factors considerations in safety?**

There always exists the possibility that some collective-bargaining matters affecting working conditions of employees may be interrelated with safety problems. Nevertheless, railroad safety involves not only the employees, but the general poublic. It is no secret that the unsafe conditions have resulted in many devastating accidents, causing great damage, injuries, and deaths to nonrailroad employees. The fact that a collective-bargaining agreement may not cover an unsafe working condition which is the cause of such accidents should not preclude Congress or DOT from doing so. The railway labor organizations simply do not have sufficient power to force the railroads to collectively bargain adequate safety rules. That is, where an important safety issue has not been resolved by self-regulation by the railroads or by FRA regulations, Congress has enacted statutory standards. The fact that labor-management relations may be involved should not deter Congress from acting.

Also, Congress has addressed the issue of qualifications of employees in the **1970** safety law and subsequent amendments. Title 45 U.S.C. 431(a) permits the Secretary of Transportation to establish qualifications of employees so long as they are specifically related to safety. However, the Secretary may not issue regulations which might disqualify an employee solely because of his age. H. R.Rep. No. 91-1194 at p. 16.

In summary, we feel Congress has dealt with both issues the most practical and effective way.

7. Should OSHA continue to handle the occupational safety and health aspects of railroad maintenance shops or should all occupational safety and health for railroads be assumed by FRA?

RLEA believes that OSHA should not only continue to handle the occupational safety and health aspects of railroad maintenance shops, but should also have occupational safety and health jurisdiction over all other aspects of the railroad industry. At present, the relationship between OSHAS jurisdiction and that of FRA is defined by Section 4 (b) (1) of the Occupational Safety and Health Act of 1970 (29 U.S.C. ~653(b)(l)). Under that section, OSHA retains jurisdiction over all aspects of railroading for which FRA has not actually promulgated occupational safety and health regulations. Only when FRA has promulgated such regulations governing a particular working condition OSHA'S jurisdiction displaced. Southern *Pacific Transportation Co. v. Usery, 539* F. 2d **386 (5th** Cir. 1976), *cert. denied,* U.S. (October **3, 1977);** *Southern Railway Co. v. OSHRC, 539* F. 2d 335 (4th Cir. 1976), *cert. denied,* U.S. (December **12, 1976);** *Baltimore and Ohio Railway Co. v.* OSHRC, **548** F. 2d 1052 (D.C. Cir. 1976).

RLEA has supported legislation designed to alter this situation and confer on OSHA exclusive jurisdiction over occupational safety and health in all aspects of the railroad industry. We have reluctantly reached this conclusion because FRA has proven entirely inadequate to the task. First, FRA has consistently failed to promulgate adequate safety standards. For example, as recently as 1976, Congress had to enact a detailed requirement that trains have highly visible rear-end markers because FRA had failed to discharge its regulatory responsibility to do so. P.L. **94-348, Sec. 5,** July **8, 1976, 90 stat.** 819. By way of explaining the enactment of specific safety requirements, the Senate Committee on Commerce stated the following:

> The inability of the Federal Railroad Administration and the Nation's railroads to make major safety gains continues to be a source of great frustration to the Committee. . . Many of the amendments contained in S. 3119 [the Act] could be accomplished under the existing regulatory powers of the FRA. Petitions regarding many of the matters contained in the amendments have been filed with the FRA but it has not responded to the petitions in a timely manner.
>
> * * * * *
>
> These amendments appear to be more appropriate for administrative rather than legislative action. However, if the agency which is responsible for implementing the Federal Railroad Safety Act is going to be unresponsive to public petitions for rulemaking, the Congress may be forced to act. S. Rep. 94-855, 94th Cong., 2d Sess. 2-3, reprinted in (1976) U.S. Conde Cong. and Ad. News, 1535-6.

Since FRA's record in discharging is responsibility for promulgating safety rules governing railroad operations is this dismal, it is ludicrous to believe that FRA will adequately regulate occupational safety and health. To relieve Congress of the burden of having to do FRA's work in that field, occupational safety and health jurisdiciton in the railroad industry should be exclusively lodged with OSHA.

Second, FRA's record of enforcing railroad safety standards is no better than its record in promulgating them. The rail workers represented by RLEA's constituent unions continually report the complete inadequacy of FRA's inspection efforts. These reports are confirmed by views expressed by concerned committees of Congress. For example, the Senate Committee on Commerce has observed that:

> Notwithstanding the statistics and the evidence of increasing deterioration, the Department of Transportation has permitted the Federal Railroad Administration to concentrate on activities other than enforcement of rail safety regulations. Senate Committee *on Commerce*, *S.* Rep. 93-1192, 93d Cong., 2d Sess. 14 (1084).

Similarly, the House Interstate and Foreign Commerce Committee has complained that:

> The weight of evidence gathered in testimony before this subcommittee indicated the Federal Railroad Administration simply was not living up to neither [sic] the spirit of the Federal Railroad Safety Act of 1970, nor, in some cases the letter of the law.
>
> * * * * *
>
> The Committee found that the Federal Railroad Administration has consistently downgraded enforcement and inspection, and has devoted most of their resources to research and development. The evidence presented in testimony before this subcommittee, and in staff research, indicated a strange set of priorities in this regard, and a conscious effort by the Department to de-emphasize inspection of rail carriers. H. Rep. 93-1083, 93d Cong., 2d Sess. 6 (1974).

The result of this failure to inspect and enforce has been an alarming increase in the number of railroad employees killed and injured on the job. FRA has thus demonstrated its incapacity to achieve safety and health protection for railroad workers. Consequently, OSHA and not FRA should be charged with that responsibility.

8. **Should Congress follow safety legislative examples it has set for other transportation modes *or* should railroads continue to be treated uniquely in future safety legislation?**

The only way in which railraods have been treated uniquely in the area of safety legislation is that they are subject to grossly inadequate safety regulations. Responsibility for promulgating railroad safety regulations has largely been delegated to the FRA, which generally has ignored that responsibility. Because of the FRA's abdication of its responsibilities, Congress recently enacted several limited statutes which address particular safety problems. See, S. Rep. No. 94-855, 94th Cong., 2d Sess. 2-3 (1976); H.R. Rep. No. 93-1083, 93d Cong., 2d Sess., reprinted **in** 1974 **U.S.** Code Cong. and Ad. News 7669, 7671.

What may or may not be necessary to reduce injuries and accidents in other industries is irrelevant. The attitudes of railroad management toward safety dictate Federal and State supervision. Moreover, the inherent dangers in railroading cannot be compared with other kinds of industries.

Because numerous railroad safety problems have not been remedied, safety legislation can only be characterized as "unique" in light of the FRA's unique failure to carry out the duties delegated to it by Congress.

9. **Should Congress consider safety policy as a part of future railroad regulatory reform legislation or should Congress consider safety policy separately?**

10. **Should Congress consider safety policy as a Part of a future railroad economic assistance policy or should safety be considered separately?**

25. **Should Government safety policy for railroads in extreme financial trouble differ from Government safety policy toward other carriers or should all carriers' safety be considered uniformIy?**

In **RLEA's** view, questions 9. 10. and ***25*** are closely related. They all involve the relation between railroad safety and the other areas in which the Federal Government regulates or assists railroads. We will, therefore, deal with these three questions together. The final paragraph of this answer summarizes our views on each question separately.

In establishing a proper relationship between Federal railroad safety regulations and other Federal regulation of railroads, there are two essential points. First, the process of, and the criteria used in, setting railroad safety standards must be kept separate from other regulatory issues. Second, useful means to supplementing,

but not supplanting, the primary methods of enforcing Federal safety standards can be built into other regulatory schemes. The following sections discuss these two points in turn.

1. Both the process of setting Federal railroad **safety standards and the criteria used to set such standards should be separated from the issues which arise** in other facets of Federal railroad regulation. Setting and enforcing minimum safety standards for railroads is essential to the lives and safety of both railroad employees and the general public. Human lives are concerned and no amount of money can buy back an amputated leg or a fatally injured worker. Since the stakes are so high, the citizens of this country have the right to expect that their Government will provide them with the maximum achievable safety protection. In working toward this goal, considerations of safety and how safety can be achieved must be paramount. Other regulatory considerations and issues should enter the question, if at all, only in the most peripheral way.

From this basic proposition, several conclusions follow. First, the task of setting minimum safety standards for railroads, whether undertaken by the Congress or an administrative agency, must be segregated from other regulatory issues. Otherwise, the efforts to achieve the basic goal, maximum safety protection, will be diluted or lost amidst the controversies surrounding other regulatory problems. For example, if safety policy were comingled with efforts to reform railroad rate-setting practices, there would be an irresistible tendency to trade safety protection off against various rate-setting considerations. Such a trade-off would be inexcusable in light of the public's right to expect maximum safety protection from its Government and the railroads that Government regulates. Similarly, if safety were considered along with financial assistance to railroads, the ground would be laid for the railroads to contend that they should be required to comply with minimum safety standards only if they are given financial aid with which to do so. Obviously, this proposition is unacceptable. No crack should be opened through which the railroads can drag it into the debate.

Second, for the same reasons, the process of establishing and evaluating the primary mechanism for enforcing Federal safety standards must be kept separate from other regulatory concerns. Safety standards are only as good as the method used to enforce them. Therefore, an adequate primary enforcement system must be established using safety as the paramount criterion. Inclusion of issues concerning this primary enforcement **mechanism in proceedings or forums in which other regulatory provisions are also considered would detract from the necessary focus on safety.** Such a procedure would be unacceptable. Safety and the enforcement of basic safety standards are not relative concepts which can be traded off against other regulatory goals. No such bargaining is permissible where human lives are so vitally affected.

Third, suggestions that safety regulation and the protections it affords to human life should be relaxed in cases of financially troubled railroads must be rejected out of hand. Observance of minimum safety standards must be viewed as an integral part of railroading. Such observance is essential to the protection of human life and is not a luxury which railroads need indulge in only when they have surplus funds. As we discuss below, the Federal Government more properly discharges its responsibilities if it provides financial assistance to help economically **weak** railroads comply with safety standards than if it relaxes those standards for such railroads.

For the reasons given, RLEA believes that the task of setting safety standards and establishing the primary mechanism for enforcing them should be governed by considerations of safety and should not be comingled with other regulatory issues.

2. RLEA does not, however, wish to give the impression that there should be no relationship between railroad safety and other regulatory programs. There are a variety of creative ways in which other regulatory programs can be used to help achieve high safety standards by supplementing the primary method of enforcement. A railroad's eligibility for financial assistance

could be conditioned on achieving high safety standards. The burden should be on the railroad to demonstrate its safety record, which it could do by showing either compliance with Federal minimum standards or, perhaps, a verified record of very few accidents. This incentive for maintaining high safety standards should not, however, be permitted to replace the primary enforcement mechanism. That mechanism must remain intact and effective to ensure maintenance of minimum standards where this incentive program and other supplementary approaches fail.

A second way in which financial assistance programs can contribute to safety is the suggestion made above that financially weak railroads be given grants to aid their safety compliance efforts. The making of such grants is a far better way for the Federal Government to discharge its obligations to the public and to railroad workers than is the suggestion that financially pressed railroads be excused from meeting minimum safety standards. Being required to comply with such standards would actually benefit railroads in financial trouble because their accident rates would be reduced with a consequent reduction in the high costs which flow from serious accidents. Care must be taken, however, to avoid any suggestion that railroads need comply with safety standards only when paid to do so.

Other examples of using general regulatory schemes to supplement the basic safety program include conditioning eligibility for rate increases on the railroad's demonstration of a good safety record and requiring that a specified percentage of each grant of Federal assistance to a railroad be used for designated safety purposes. Through these and similar strategies, strong incentives for safety compliance can be built into many facets of railroad regulation. However, the basic task of setting and enforcing safety standards should, as we point out above, be segregated from general regulatory concerns.

The foregoing should make clear our position on the three questions we are addressing in this answer. As to questions 9 and 10, we believe that Congress should consider the tasks of setting safety standards and enforcing those standards separately and not as a part of future railroad regulatory reform legislation or future railroad economic assistance policy. However, as we point out, both regulatory policy and economic assistance can be used to supplement the basic safety program. As to question 25, we believe that the Government should, under no circumstances, relax safety standards for railroads in extreme financial trouble. We do believe, however, that it maybe appropriate for the Federal Government to assist such railroads in complying with safety standards so long as there is no implication that those railroads need comply only so long as they are assisted.

11. **Should the Government role in railroad safety be clarified and/or expanded or should clarification and increased responsibility for safety be handled by railroad carriers, suppliers, and labor with Government policy directed strictly toward public concern (e.g., hazardous materials and railroad grade-crossings) ?**

The Government's responsibility in railroad safety should be expanded and clarified. The Federal Railroad Administration has avoided promulgating and enforcing adequate safety regulations. History has shown that railroad carriers, suppliers, and labor cannot be expected to assume increased responsibility for railroad safety. The suppliers and labor do not have the leverage to force the railroad carriers to adopt adequate safety measures, and the railroad carriers have exhibited a continuing unwillingness to voluntarily adopt such measures.

The question implies that railroad safety, other than such safety matters as hazardous materials and railroad grade-crossings, is of no concern to the public. On the contrary, the public is vitalkly concerned with railroad safety. For example, the number one cause of rail accidents in America is track failure. To suggest that rail accidents caused by track failure or any other safety deficiency are not of public concern is absurd. Many track failures have resulted in explosions from a derailing train.

The Committee on Interstate and Foreign Commerce cited the growing evidence that track failure is a direct result of industry policy to defer maintenance. H.R. Rep. No. 93-1083, 93d Cong., 2d Sess., reprinted in (1974) U.S. Code Cong. and Ad. News 7669, 7673-75. So long as such deferred maintenance continues and the railroads do not require adherence to the safety laws, rail safety will not be improved.

12. **Should Federal Government policy continue to preempt State regulatory enforcement authority or should State authority be expanded?**

No. Under Section 206(a) of the Federal Railroad Safety Act of 1970 (45 U. S. C. A., Sec. 435(a)), the Federal Railroad Administration can assess penalties or obtain injunctive relief in Federal courts for violations of safety standards. Pursuant to Section 207 of the Act (45 U. S. C. A., Sec. 436), if the Secretary has taken no action on an alleged violation for a period of 90 days, a State may go into Federal court for relief unless the Secretary has determined in writing that no violation has occurred.

The States need some independent enforcement authority to support their investigative efforts. The present enforcement mechanism is cumbersome and is not supportive of State efforts to carry out an effective safety program. State inspectors are frequently treated with less respect than is due because the railroads know that, for all practical purposes, no violations will be enforced unless the Federal Government pursues the matter.

There appear to be few, if any, valid reasons for what amounts to a complete preemption of State enforcement authority. On the contrary, it would seem that the States are frequently in a better position to pursue swift and responsible enforcement of safety standards. Further, the States' concern for the safety of their citizens and the potentially disastrous local consequences of violations of Federal standards require that the States, at a minimum, be vested with authority to seek immediate injunctive relief.

A bill (H.R. 8361) has been introduced in the 92d Congress by Congressman Rooney of Pennsylvania, and referred to the House Committee on Interstate and Foreign Commerce, which would amend the **1970** Act to allow a State participant to apply for such immediate injunctive relief in the district courts of the United States. Enactment of such provisions into law would greatly enhance the national effort to improve the railroad safety record.

13. **Should the State Participation Inspection Program, authorized by the 1970 Act, be repealed, revised, or maintained in its current form?**

Section 206 of the Federal Safety Act of 1970 (45 U. S. C. A., Sec. 435) establishes authority for State participation in the enforcement of Federal railroad safety standards. Those States certified to carry out investigative and surveillance activities on behalf of the Secretary of Transportation, and those States which have entered into agreements with the Secretary, provide money and manpower to ensure that safety regulations promulgated in Washington, D. C., are, in fact, implemented throughout the country.

Section 206, as approved by Congress, was regarded as a key section of the bill. State regulators had high hopes that it marked the beginning of a cooperative Federal-State effort to drive down the depressingly high accident statistics.

Yet the FRA has interpreted Section **206(a)** in a manner which precludes the States from participating in the enforcement of rail safety laws passed either before (e.g., the Signal Inspection Act) or after (e.g., the Hazardous Materials Transportation Act) the 1970 Act. Such an interpretation, whether or not justified by the legislative history of the Act, reduces the role the States may play in improving rail safety and prevents the States from making maximum use of available manpower. If a State wishes to establish a comprehensive safety program, in which the duties and responsibilities of its employees are clearly defined, it must have authority to enforce all relevant Federal standards.

Again, it is difficult to see how the national goal of reducing all railroad-related accidents can be achieved when the potentially most effective and concerned party, the State agency, can approach the problem only in a piecemeal manner. The House bill (H. R. 8361), referred to in the answer to question 12, would allow participating States to carry out investigative and surveillance activities in connection with railroad safety laws and regulations in effect on the date of enactment of the 1970 Actor made effective subsequently.

These provisions of the bill would effectively modify the 1970 Act to ensure more meaningful participation by the States and other affected parties.

18. Should specific criteria and research data be a mandatory part of the rulemaking process or is the current system adequate?

RLEA is uncertain as to the precise meaning of this question. On the one hand, the question may ask whether Federal railroad safety standards and rules should, whenever possible, be written in terms of specific, measurable criteria with which railroads must comply, rather than in general terms. On the other hand, the question may ask whether the rulemaking process should be revised to require that safety standards be promulgated only when the need for and the content of such standards can be determined by reference to data produced through research projects. We will address both of these questions in turn.

First, Federal safety standards for the railroad industry should be written, whenever possible, in terms of specific requirements and criteria. Federal railroad safety standards are necessary because the industry has proven incapable of maintaining adequate safety standards without external compulsion. To remedy this situation, the Federal standards must be readily enforceable. Only standards written in specific terms will be enforceable because they are the only ones under which it is possible to determine when a railroad is or is not in compliance. Furthermore, such precise standards provide an additional benefit. They encourage voluntary compliance because both employees and the railroads know what is expected of them and that violations will not go undetected for long.

A flagrant example of failure to adhere to these sound principles can be found in the flagging rules recently promulgated by FRA. That regulation (49 CFR $218.37) appears, on first inspection, to require flag protection for the rear-end of stopped and slowly moving trains. However, closer examination reveals that 49 CFR ~218.37(a)(2)(iv) permits the railroad to dispense with this requirement simply by issuing a train order to that effect. The regulation contains absolutely no standards or guidance to indicate the situations in which it would be appropriate for the railroad to issue such a train order. FRA has thus promulgated an unenforceable regulation because railroads are given discretion to grant themselves waivers and there are no standards to guide their exercise of that discretion. Unenforceable standards such as this one should be replaced by standards which can be enforced.

We turn now to discuss whether the setting of minimum Federal safety standards should await the availability of research data establishing the need for and the content of such standards. RLEA's answer to this question is emphatically in the negative.

The best source of information concerning the need for safety standards and the type of standards which should be adopted is the years of practical experience possessed by the individuals involved in the railroad industry, both railroad workers and management personnel. By drawing on their experience, these individuals can identify necessary regulations long before researchers obtain the necessary funding even to begin studying the same problems. Similarly, those with actual experience in the field can provide workable, common-sense solutions to safety problems without waiting for studies and research projects to be completed. Regulatory implementation of the solutions provided in this manner can save lives and make railroading safer for all involved. There is no valid reason not to embody these years of prac-

tical experience in safety regulations as soon as possible.

Awaiting confirmation of these common-sense judgments through expensive, time-consuming research projects would be irresponsible. Everyone is familiar with the recurring phenomenon of heavily funded research projects which, when finally completed, tell us little more than we already know through observation and common sense. Making the results of such research a prerequisite to the issuance of Federal safety standards would merely delay essential protection for railroad workers and the public. Such a requirement would only serve to give those who wish to prevent or delay the promulgation of enforceable Federal safety standards the opportunity to do so by arguing that a particular regulation should not be promulgated because the requisite studies have not been completed or are inadequate. These opponents of safety standards should not be given this excuse to avoid obviously needed regulation.

For the foregoing reasons, RLEA opposes any attempt to mandate the use of specific research data in rulemaking. Such data, when available, should be considered as part of the overall rulemaking process. However, it should take its proper place as only one relevant factor, along with common sense and practical experience in the field. Research data should not be artificially elevated to a status more important than its intrinsic worth merits.

21. **Should (participating) State inspectors be qualified and paid according to Federal standards or should States establish their own inspector qualifications and pay scales?**

The States should be allowed to establish their own inspection qualifications and pay scales. There is nothing in the language or legislative history of the 1970 Act which requires or specifically allows the FRA to promulgate qualifications for participating State inspectors. The Act itself was modeled after the Natural Gas Pipeline Safety Act of 1968 (49 U.S.C. 31674), which did not require State inspector qualifications and under which none had been promulgated. Nevertheless, the FRA has procedded to establish minimum qualifications for State inspectors in the two areas where safety standards have been issued, which are as stringent or more stringent than those for Federal inspectors.

Federal inspectors are classified at a GS-11 or GS-12 level, with a minimum salary in 1976 of $16,255 and **a maximum of $25,200.** In addition, there are opportunities for promotion to supervisory positions at GS-13 and GS-14 levels. In contrast, the starting salary in 10 States is less than $10,000, **21** States have a ceiling of **$16,800** or less for senior inspectors, and only 1 State can pay more than $22,000. Given the State pay scales and State budgetary problems, it seems clear that FRA's insistence on State inspectors meeting the same specifications as are required for Federal inspectors serves as a serious deterrent to participation by many States.

The FRA appears to argue that its standards are the minimum necessary to ensure that a State inspector is qualified to perform his tasks. However, it should also be noted that the standards are patterned after Civil Service Commission job classifications designed to provide, to the maximum extent possible, uniformity and equity in Federal hiring practices. Thus, under present Federal practice, a job applicant must have 3 years general experience and 3 years of specialized experience to qualify for a GS-11 position, whether that position is in railroad safety inspection or aircraft maintenance.

There is simply no justification for attempting to conform the myriad of State hiring and salary regulations to the Federal system, yet this appears to be exactly what the FRA is attempting. Further, there is no reason to doubt that the States would diligently pursue the goal of seeking out and hiring qualified personnel to serve as State inspectors for, after all, it is their citizens who will suffer the most from an inadequate State safety program. Accordingly, the States should be given the greatest possible latitude in establishing their own inspector qualifications and pay scales.

23. **Assuming deferred maintenance correlates with deceased safety, should the Federal Government monitor equipment- and track-maintenance programs, should it rely on existing safety standards, or should it revise standards to mandate safety maintenance?**

RLEA believes that regularly conducted maintenance correlates with increased safety and that the Federal Government, either through legislation or through regulations, should mandate regular safety maintenance. Railway labor is in a particularly good position to judge the effectiveness of regular maintenance programs because the men we represent work on railroads where the maintenance programs vary from good to almost nonexistent. Comparing the safety experience of these railroads can lead to only one conclusion: where regular, thorough maintenance programs are conducted, safety hazards are detected and corrected, thereby significantly reducing the incidence of accidents and injuries. On the other hand, where regular maintenance is deferred, accidents increase. These views are confirmed by the House Committee on Interstate and Foreign Commerce:

> The number one cause of rail accidents in America is track failure. There is growing evidence that track failure is a direct result of industry policy to defer maintenance. H. Rep. No. 93-1083, 93d Cong., d Sess., reprinted in (1974) U.S. Code Cong. and Ad. News, 7669, 7673-75.

Only regularly conducted maintenance can be expected to keep railroad equipment and track in safe and efficient operating condition. No Federal inspection effort can eliminate unsafe conditions, if the basic maintenance program is inadequate. Therefore, Federal safety regulations should be revised to require not only compliance with minimum standards, but also regular maintenance. Failure to require this most effective way of keeping track and equipment in a safe condition is inexcusable.

24. **Should Government responsibility in closing potentially unsafe plants or operations be based solely on safety considerations or should economic considerations also be taken into account?**

RLEA believes that only safety considerations should be used in deciding when equipment or facilities are so unsafe that they must be closed or taken out of operation in order to prevent death or injurv to Persons affected. As stated previously, the citezenns of this country have the right to expect that the Government will provide them with the maximum achievable safety protection. Congress has already adopted this same view. In the Federal Railroad Safety Act of 1970, Congress gave the Secretary of Transportation authority to "immediately issue an order.. prohibiting the further use of" any facility or piece of equipment which the Secretary determines is "in unsafe condition and thereby creates an emergency situation involving a hazard of death or injury to persons affected" (45 **U.S.C.** 432). In 1974, Congress broadened the authority to permit the Secretary to issue orders directing a railroad to terminate any action in violation of the safety laws (45 U.S. C. 437(a)). As the language under both sections makes clear, the Secretary's authority to order a facility closed depends solely on the hazard to persons affected. See H.R. Rep. No. 91;1194, 91st Cong. 2d Sess., reprinted in (1970) U.S. Code Cong. and Ad. News, 4104, 4116. The Secretary is not authorized to take economic considerations into account in making such order.

In enacting this provision, Congress recognized that, when a facility must be closed in order to prevent death or physical injury, there is no economic consideration which can properly be advanced to keep the facility open. RLEA heartily endorses this position.

29. Should **an established set of priorities for rulemaking be determined-based on analysis of existing accident and incident data and available research, or is the current method of selecting rules appropriate?**

The setting of priorities for issuing Federal railroad safety rules should be based, insofar as possible, on the expressed needs of the persons

affected by those rules, including railroad employees who must spend their working lives exposed to railroad safety hazards. The persons exposed to the hazards of railroading are the ones whose health and lives are at stake and who have the necessary experience to recognize safety problems and areas needing regulation. The present system under which interested persons may file petitions requesting rulemaking upon which FRA must act within a statutorily prescribed time limit provides an appropriate mechanism through which the need for safety regulations as perceived by the persons affected by those regulations can be recognized. See 45 U.S.C. 431(d) and 49 C.F.R. ~211.9 et seq.

This procedure could be strengthened by enacting specific standards to govern FRA's decision as to whether to initiate rulemaking proceedings on a particular petition. At present, the only standard is that contained in 49 C.F.R. ~211.ll(b), which states that FRA will initiate rulemaking when the Administrator determines "that the petition contains adequate justification." More appropriate would be a statutory requirement that FRA initiate rulemaking on each petition unless the Administrator is able to make a factual finding that the conditions described in the petition do not pose a hazard to the safety of railroad employees or the public. Under this requirement, the Administrator would not be able to decline rulemaking in cases where hazards requiring regulation exist.

Establishing a system that requires setting regulatory priorities based on accident data and available research would be a step in the wrong direction. Such a system would not be responsive to the express needs of persons exposed to railroading hazards. Rather, it would place responsibility for setting regulatory priorities in the hands of the regulated railroads and the individuals who determine research priorities.

A priority system based on accident data would be controlled by the railroads. Except in those cases where the National Transportation Safety Board or FRA investigates a major accident, responsibility for reporting accidents is in the hands of the railroads. The railroads, without input from their employees, are thus free to place their own interpretation on the accident and assign to it whatever cause, such as employee error, suits their purpose. If regulatory priorities were set by analyzing the causes of accidents as indicated in the reports submitted by the railroads, the railroads could, by manipulating the accident reports, manipulate FRA's regulatory priorities. To alleviate somewhat the present deficiency in accident reporting, the employee representatives, on a voluntary basis, should be afforded an opportunity to present relevant factual information concerning safety violations of the carrier.

Reliance on available research to set priorities would suffer from a similar infirmity. The availability of research data on which to base regulations in a particular area depends largely on whether research projects in that area have been funded. Some topics will have been thoroughly researched and others will not. Consequently, priorities based on the availability of data produced by such research will be determined by the persons who choose the areas in which research will be conducted. Again, the result would be to take the setting of regulatory priorities away from the people in the field who are in need of the protection and who are in the best position to determine what type of protection is needed.

The proper role of both accident statistics and available research should be to aid in evaluating petitions for rulemaking. When used in this way, the limits of both research data and accident reports, as described above, should be kept clearly in mind. Conclusions drawn from such information should always be tempered with common sense and knowledge gained through practical experience.

30. How should priorities be established for research and development?

It is clear that there is not **a** single simple solution for establishin$_g$ research priorities, goals, and ensuring continuing effectiveness. In addition to supporting FRA safety mandates, the following considerations are deemed prime fac-

tors in any responsible R&D safety activity justification:

1. Statistical Trends (Accidents, Fatalities, Injuries, Cost). —History is always a good starting point for determining the relative importance of problem areas. Reasonably accurate data bases are necessary but not sufficient to set R&D priorities. It is extremely difficult to set up in advance and justify a comprehensive system of data collection which has enough detail to guide research efforts. In addition, history sometimes reacts too slowly to newly emerging problem areas—such as nuclear transport hazards.

2. Evaluation of Statistical Trends.—Statistical trend data must be mixed with "practical" assessments and inputs from knowledgeable representatives, who are actively engaged in the railroad processes on a daily basis. Different perspectives and interpretations need to be solicited and openly discussed. Frequently, where perceived priorities are made, more in-depth statistical information may need to be developed through limited surveys, communications, and investigations. Such data supplements the broader guidelines of the formal data system.

3. **Safety Problems Projections /Predictions.—There are some cases where major safety concerns** may *not* be revealed in statistics. Consequently, there is a need to make projections as to likely future railroad safety problems. Areas of greatest concern here would tend to be situations where a singIe accident might have catastrophic consequences.

4. Will **Research Help?—It may be in certain applications that no new technology is required to make substantial improvements in safety.** In such cases, even though the statistical problem is demonstrated, initiation of significant research endeavors may not be appropriate.

In other "grayer" areas, the balance between the extent of research allocation and probable benefits must be "traded off."

5. **Extensive Exposure of R&D Activity/Plans.—Priorities for on-going R&D activities** need to be continually re-examined from the viewpoints of current progress and perceptions of incolved parties. Where possible, resources among individual groups should be maximized by avoiding unnecessary duplication, even though agreed to parallel research paths by industry/Government groups may be entirely warranted in significant safety projects—because of recognized constituency differences.

6. "Opportunity" for Immediate Progress/Implementation. —Absolute priorities for R&D need to be adjusted periodically to reflect current conditions that may be attractively conducive for swift implementing actions. This criteria of "the time is ripe" provides the flexibility to realize the difficult *implementation* goal of applied research.

7. Potential "Break-Through" Potentials.—Periodically, on-going research findings may reveal potentials for unanticipated advanced in safety. Any system for establishing priorities for research and development should recognize the need to consider diversion of an appropriate amount of efforts to further evaluate the feasibility of uncovered potentially "high reward" technological "break-throughs."

8. **Public/Legislative Requirements. —Although priorities should be established to anticipate "public" presures, R&D resources must be allocated to be responsive to public, regulatory, and legislative directives and requests; whether from local, State, or Federal levels.**

The driving thrust in all of the above considerations should be aimed at achieving a reduction in the rate of personal fatalities and injuries associated with railroad activities.

31. Should research, development, dissemination, and implementation of new technology, which would increase safety, take *in*-**to account existing collective-bargaining and economic factors, or should such technologies preclude those considerations?**

In terms of uncovering potentials for making substantial improvements in the rate of fatalities

and injuries, R&D efforts should not be unnecessarily "bounded."

Prejudgments that "the industry can't afford to do anything about that" could conceivably block research activity which might uncover a larger systematic approach which could not only be economically justified but be attractive from industry/union/public viewpoints. Within the realm of established priorities, R&D should be as "free" as possible—consistent with the application of realistic yardsticks to prevent "cloud-nine" approaches.

On the other hand, the implementation process must take into account real world "political," economic, and collective bargaining factors.

Dissemination of R&D information should be virtually unrestricted, extensive, and responsive to requests from all sources.

32. **As research identifies technological or other practices which may impact safety, how should these considerations be weighted against policies such as economic, environmental, or collective-bargaining factors or should such findings be considered separate?**

Generally, the research role should be viewed as providing factual support in the technology regime of the total picture. Appropriate broader-view forums should be utilized to "mix" input from R&D and various other "expert" safety interest groups—to analyze and arive at decisions/compromises which more fully comprehend the specturm of meaningful considerations.

At times, R&D findings may serve only in a minor way to assist in effective resolution of the overall safety problem.

33. **To what extent should near-term safety benefits be considered in lieu of long-term economic and/or other long-term safety policies?**

Where safety benefits are defined as reduction in loss of lives, near-term progress should be the foremost consideration, i.e., every practical opportunity should be seized to assist in this respect. Where long-term intentions and accomplishments are in direct conflict with contemplated near-term actions, the immediate opportunity should be modified (i.e., if a better 5-year fatality picture can be convincingly supported). A positive attitude should be brought to bear on economic implications. Ways in which public money might be utilized to augment and improve the railroad industry cost/benefit ratio should be actively explored for each specific safety improvement proposal.

Research and development efforts should be conducted toward supporting near-term improvements (within the above philosophy) while generating guidelines for longer-term gains (i.e., deal with the existing equipment retrofit needs while providing the basis for *new* equipment safety specifications). This near-term focus ensures "practicality" and provides a foundation for the generation of knowledgeable guidelines for future safety improvement actions.