

## **<u>VOLUME 6C</u>** GUIDE TO VOLUME 6C

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# FINAL ENVIRONMENTAL IMPACT STATEMENT

Finance Docket No. 33388

# "PROPOSED CONRAIL ACQUISITION"

CSX Corporation and CSX Transportation, Inc. Norfolk Southern Corporation and Norfolk Southern Railway Company

Control and Operating Leases/Agreements Conrail, Inc. and Consolidated Rail Corporation



# VOLUME 4 Chapter 6: Safety Integration Planning

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# **GUIDE TO VOLUME 4**

Volume 4 of the Proposed Conrail Acquisition Final EIS contains the following items:

- Guide to Volume 4.
- Contents of Chapter 6.
- Chapter 6, "Safety Integration Planning."
- Guide to the Final EIS.
- Glossary of Terms.
- List of Acronyms and Abbreviations.
- Contents of the Final EIS.

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# CHAPTER 6 SAFETY INTEGRATION PLANNING

#### 6.1 INTRODUCTION AND SUMMARY

The Surface Transportation Board (Board) considers railroad safety a paramount concern in the transactions it licenses. In merger and acquisition cases, the Board imposes appropriate environmental conditions to ensure the day-to-day safety of the operations it approves (such as upgraded highway/rail at-grade crossing warning devices where train traffic would increase and special procedures for hazardous materials transport). In the past, however, the Board has not focused on, or been asked to address, an applicant's process for combining and safely integrating the infrastructure, equipment, personnel, and operating practices of two or more entities following a merger or acquisition. For the first time in an environmental review, the Board has considered this process, called safety integration. The Board required specific integration actions by the proposed Conrail Acquisition Applicants.<sup>1</sup>

Following the Federal Railroad Administration's (FRA's) expression of concern about the potential effect that the proposed Conrail Acquisition might have on rail safety and the recommendation by FRA and others including railroad labor that CSX and NS develop a safety integration plan, the Board directed the Applicants to prepare and submit Safety Integration Plans explaining their intended process for integrating the operations of CSX, NS, and Conrail. The Applicants developed these Safety Integration Plans within guidelines set by FRA, the agency responsible for railroad safety regulation.<sup>2</sup> The Board included the Safety Integration Plans in the Draft Environmental Impact Statement (EIS) to allow review and comment by FRA, the public, and other parties. The Board's Section of Environmental Analysis (SEA) also conducted an independent review of the Safety Integration Plans.

2

<sup>1</sup> 

The Applicants are CSX Corporation and CSX Transportation (CSX) and Norfolk Southern Railway Company and Norfolk Southern Corporation (NS), and Conrail, Inc. and Consolidated Rail Corporation (Conrail).

USDOT enclosed a copy of FRA's Safety Integration Plan guidelines as an attachment to comments USDOT submitted dated February 2, 1998. For a reproduction of these guidelines please see Appendix A, "Comments Received on the Draft Environmental Impact Statement," pages 27a-28b.

The U.S. Department of Transportation (USDOT) commented on the Draft EIS to express FRA's position that the Safety Integration Plans address and satisfactorily mitigate every safety concern raised in the environmental review portion of this proceeding and that no other mitigation on this subject would be necessary or appropriate. In addition, USDOT states that the Applicants' commitments made to date satisfy FRA, and that FRA will continue to work with the Applicants to address safety integration issues as they arise, if the Board approves the proposed Conrail Acquisition. To ensure that the Applicants follow the safety integration process that the Board and FRA have defined, SEA recommends that the Board impose an environmental condition requiring the Applicants to comply with the Safety Integration Plans, which may be modified and updated as necessary to respond to evolving conditions.

Safety integration is an ongoing process with activities that will continue if the Board approves the proposed Conrail Acquisition. Moreover, both FRA and the Board recognize that, while safety integration involves both agencies, FRA is equipped and willing to monitor the Applicants' implementation of their Safety Integration Plans. Accordingly, the Board has agreed to enter into a Memorandum of Understanding (MCU) with FRA, with the concurrence of USDOT, to establish an ongoing process whereby FRA will monitor the Applicants' implementation of the Safety Integration Plans and other safety integration issues that may arise and advise the Board of the Applicants' progress in the event the Board approves the proposed Conrail Acquisition. The MOU, described in more detail below and presented in full (unsigned) at the end of this chapter, provides that FRA may request action by the Board, in exercise of the Board's oversight authority over the Applicants, to correct identified deficiencies and address safety problems resulting from the proposed Conrail Acquisition. When requesting Board action, FRA will provide recommendations for correcting the deficiency. FRA will report periodically to the Board regarding safety integration of the proposed Conrail Acquisition. FRA will also report significant integration issues to the Board if and when they are identified. FRA's reporting will continue, not less frequently than biannually, until FRA affirms to the Board in writing that the proposed integration of the CSX, NS, and Conrail systems has been completed safely and satisfactorily.

Given the Board's safety objectives, the comments received from USDOT and other parties, and the ongoing activities planned by the Board and FRA, SEA recommends that the Board impose an environmental condition requiring the Applicants to participate and fully cooperate with the ongoing regulatory activities associated with safety integration as described in the MOU. This condition would ensure continuing participation by the Applicants until FRA affirms that the integration of the Applicants' systems has been completed. SEA is confident that this approach to safety integration will allow Conrail, NS, and CSX to integrate their systems in a manner that is responsive to the requirements of public safety. SEA does not believe that any further environmental mitigation in this area would be warranted.

The remainder of this chapter provides information regarding the following topics:

- Procedural History.
- Explanation of Safety Integration Topics and Issues.
- Summary of Comments regarding the Safety Integration Plans.
- SEA's Responses to Comments.
- SEA's Recommended Conditions.
- Board and FRA MOU Text.

#### 6.2 PROCEDURAL HISTORY

Following expressions of concern about the potential effects of the proposed Conrail Acquisition on rail safety and the recommendation by FRA and others including railroad labor that CSX and NS develop a safety integration plan, the Board served Decision No. 52 on November 3, 1997. Decision 52 directed CSX, NS, and Conrail to prepare and submit Safety Integration Plans that would explain the intended process for integrating the Applicants' infrastructure, equipment, personnel, and operating practices. Safety Integration Plan guidelines were then developed by FRA for the proposed Conrail Acquisition. FRA issued these guidelines to the Applicants on November 7, 1997.

The Applicants followed the FRA guidelines and submitted their Safety Integration Plans to the Board on December 3, 1997.<sup>3</sup> SEA packaged the Safety Integration Plans as a part of the Draft EIS to provide an opportunity for review and comment by FRA. the public, state and local governments, labor unions, and the Applicants. SEA also carefully reviewed the Safety Integration Plans after their publication in the Draft EIS. As requested by FRA, the Safety Integration Plans provide information regarding the intended integration of operations, including:

- The differences in safety standards, procedures, and programs among Conrail, CSX, and NS.
- The best existing safety standards, procedures, and programs of Conrail, CSX, and NS.
- The safety standards, procedures, and programs each railroad would ultimately use.

<sup>3</sup> The three plans are:

- Safety Integration Plan of CSX Corporation and CSX Transportation, Inc.
- Norfolk Southern's Safety Integration Plan.
  - CSX/NS Safety Integration Plan for Conrail Shared Assets Operations (filed jointly by CSX, NS, and Conrail.)

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- CSX's and NS's planned integration of their own safety standards, procedures, and programs, on a step-by-step basis, with those of Conrail.
- The actions the Applicants would take to comply with Federal regulations.

Since the December 3, 1997, submittal of the Safety Integration Plans, FRA has continued working with the Applicants to refine the Safety Integration Plans and to prepare for safe integration of CSX, NS, and Conrail systems in the event the Board approves the proposed Conrail Acquisition. FRA has developed additional monitoring processes, for example, a requirement for the Applicants to provide Safety Integration Plan accountability matrices that further define implementation elements such as schedules and resource requirements. SEA has also continued safety integration activities, including a review of the Safety Integration Plans and of comments received regarding the Safety Integration Plans from USDOT, the Applicants, and other parties. In addition, SEA has discussed safety integration issues with the Applicants.

The Board and FRA recognize that safety integration is an ongoing process that involves both agencies. Accordingly, FRA and the Board have agreed to enter into a MOU, with the concurrence of USDOT, whereby FRA will monitor, evaluate, and review the Applicants' progress in implementing their Safety Integration Plans and other integration-related safety matters brought to the attention of FRA. FRA's role includes responsibility for the requirements of public safety and the safe implementation of rail operations by the Applicants following the proposed Conrail Acquisition. FRA will monitor the Applicants' implementation of the Safety Integration Plans and advise the Board of the Applicants' progress.

If deemed necessary, as agreed to in the MOU, FRA may request that the Board exercise its oversight authority over the Applicants and take action to correct identified deficiencies and address safety problems arising out of the approved Conrail Acquisition. In those circumstances where FRA informs the Board of a concern that may require Board action, FRA will provide sufficient information to the Board to identify the safety deficiency, describe the implications of the deficiency, and provide recommendations for correcting the deficiency. FRA will report to the Board on a periodic basis regarding safety integration and any time FRA observes significant safety integration issues developing. FRA's reporting will continue, not less frequently than biannually, until FRA affirms to the Board in writing that the integration of the CSX, NS, and Conrail systems has been completed safely and satisfactorily.

## 6.3 SAFETY INTEGRATION PLANNING OVERVIEW

#### 6.3.1 Purpose and Topics of the Safety Integration Plans

Implementation of the proposed Conrail Acquisition would require the Applicants to integrate the operating practices of two or more entities into a single program of safety-related measures. As noted, both the Board and FRA recognized that this integration process requires specifically tailored planning. In Decision 52, the Board directed CSX, NS, and Conrail to prepare specific Safety Integration Plans.

The purpose of the Safety Integration Plans is to begin a documented process of effectively integrating safety-related infrastructure, equipment, personnel, and operating practices. The Applicants will continue the process by adding detail to the Safety Integration Plans and modifying them as necessary to reflect evolving conditions in the event the Board approves the proposed Conrail Acquisition. Likewise, an ongoing regulatory oversight program, planned by the Board and FRA, will provide continuing monitoring, evaluation, and review of the Applicants' integration activities until FRA affirms to the Board in writing that the Applicants' integration has been completed safely and satisfactorily.

The FRA safety integration plan guidelines provided the Applicants with overall direction regarding the Safety Integration Plan topics and areas of documentation. SEA's analysis identified additional safety integration topics, such as Safety Management Process and Implementation Monitoring and Feedback, that SEA examined and discussed with the Applicants.

The following sections are brief explanations of safety integration topics. This includes topics required by FRA's safety integration plan guidelines and included in the applicants' Safety Integration Plans. Also listed are additional safety integration topics identified, and discussed with the Applicants, by SEA.

#### 6.3.2 Operating Practices, Rules, and Procedures

An important safety integration activity that merging railroads perform is to combine different operating rules. Railroad operating rules prescribe activities such as on-track occupancy requirements, authorization procedures for track usage, and signal system rules. In addition, the railroad operating rules typically set forth general signal system rules, rules of employee behavior, and rules for reporting accidents and incidents. Timetables, bulletins, and notices augment the general operating rules. To operate safely, a railroad must require strict adherence to its operating rules by all employees. Although one railroad's operating rules may be similar to another's, they generally are different enough to require training for an employee of one railroad to operate equipment or perform work on the trackage of another.

#### 6.3.3 Dispatching

Railroads face special challenges as they combine formerly separate dispatching functions following a merger or acquisition. Changes in dispatching would require safety-related integration activities. "Dispatching" is the railroad term for the real-time planning and control of train movements. Dispatching problems can cause train delays which in turn may lead to hurried decisions that impact safety.

Large railroads typically have either a single operations control center that houses all dispatching activities or a small number of regional control centers. Each control center has a number of dispatcher "desks" or workstations. The dispatcher at each desk directs train operations over a specific portion of the railroad network, aided by suitable control and communications equipment. An operations control center must provide smooth and error-free service to minimize

delays and associated safety risks. All equipment, including computer software, must function reliably. Dispatchers must be properly trained and familiar with the territory they control.

#### 6.3.4 Signals, Communications, and Train Control

Railroads use signals, communications, and train control to manage the safe movement of trains. The items of equipment include:

- Wayside and/or cab signals that indicate the maximum allowable speed. .
- Interlocking systems that govern the signals and switches at a junction.
- Block signal systems that maintain a safe separation between trains on the same track. .
- Switch and signal displays and controls that help dispatchers manage train movements. .
- Voice and data communication systems that link control centers with operating personnel.

The proposed Conrail Acquisition would increase the diversity of signal and communications equipment on CSX's and NS's systems and would, therefore, require effective integration activities.

#### 6.3.5 Motive Power and Equipment

"Motive power and equipment," often referred to as "equipment," is railroad terminology for locomotives and freight and passenger cars. Mechanical failure of equipment can cause railroad accidents. Railroads have developed procedures, some of which are required actions under FRA safety regulations, to reduce equipment failure, including:

- Adherence to recognized standards and operating practices in equipment design and manufacture.
- Adherence to safe wear-limits for components such as wheels and brake shoes.
- Regular testing and reconditioning of selected safety-critical components.
- Regular inspection of safety-critical locomotive systems and components every 3 . months.
- Visual inspection of freight trains prior to departure and at selected travel intervals.
- Testing of freight train brakes prior to departure. .
- Installation of wayside defect detectors at intervals along main routes.

For these precautions to be effective, equipment inspection and maintenance staff must have adequate training, experience, tools, and time to do their jobs properly. Following a merger or acquisition, effective integration of equipment-related operating practices and personnel must be accomplished.

#### 6.3.6 Track and Structures

The term "track and structures" refers to both the track itself (rails, cross ties, and ballast) and structures such as bridges, culverts, and tunnels. Track failures such as broken rails, large track misalignments, and turnout defects can result in accidents. Practices to minimize the risk of accidents resulting from track failure include:

- Regular visual inspections of the track by railroad-qualified staff.
- Automated inspection of rails for internal defects.
- Automated track geometry measurements.
- Periodic inspections of bridges and other structures by railroad-qualified staff.
- Use of automatic devices to detect dangerous situations (for example, a rock fall or a flood).
- Adherence to recognized standards and practices for track installation and maintenance.

FRA regulations require adherence to minimum track quality standards. If the Board approves the proposed Conrail Acquisition, the Applicants must ensure that appropriately trained and experienced staff perform activities at the proper time and with the right tools and equipment.

#### 6.3.7 Hazardous Materials Transport and Handling

Effective hazardous materials safety programs rely on databases for tracking rail cars, communicating with shippers and emergency response teams, and providing well-trained workers. Each railroad's approach to hazardous materials safety is different. A merger or acquisition requires integration of different approaches. Incomplete integration or insufficient planning can cause gaps and deficiencies in safety-critical programs related to hazardous materials.

#### 6.3.8 Passenger Service

Passenger and freight railroad operators, through many years' experience, have developed operating practices for safe operation of freight and passenger trains on shared tracks. Considerations resulting from the proposed Conrail Acquisition include:

- Changes in traffic patterns may increase freight traffic on certain shared lines and create a need for new safety precautions.
- Operating and staffing patterns may change and create a need to train and qualify additional train crews and dispatchers in passenger line operating rules and practices.
- Newly assigned freight railroad staff may not be thoroughly familiar with unique passenger train service safety measures.

During integration planning, the Applicants must recognize these issues and include provisions for taking appropriate safety precautions.

#### 6.3.9 Overall Safety Management Process

When railroads integrate operations and safety management systems, they can inadvertently remove existing controls that help to minimize hazards and potentially create situations that could harm people, property, or the environment. The process of identifying and resolving hazards within railroad operations is very important during any period of change. During times of change, it is also important that employees know what to do if they identify a new hazard or believe that the control measures for a known hazard are no longer effective. Broad-based participation also helps employees feel they "own" the resulting safety management system, creating a sense of ownership that makes successful implementation more likely.

#### 6.3.10 Planning and Scheduling

Following a merger or acquisition, railroads face the task of integrating different safety management systems. This integration involves a number of challenging issues, such as identifying and blending the "best" of two or more distinct systems, changing roles and responsibilities within the organizations, and training staff in new procedures. These issues would all affect the successful implementation of a new unified system. Therefore, planning and scheduling tasks must take these issues into account.

After the initial planning and scheduling phase, a railroad must define how it will implement changes to an existing safety management system, including:

- Details on the critical path and phasing of each activity involved.
- A detailed schedule specifying time allocations for each activity, as well as key milestones.

- An organization chart detailing safety responsibilities of personnel within the organization.
- Identification of any additional resources required.
- A strategy for communicating information regarding changes to all concerned.

#### 6.3.11 Staffing and Workload

Staffing and workload issues present challenges for railroad managers in a merger or acquisition. Railroads must assess their existing staffing levels and evaluate future needs to ensure they have sufficient resources to meet operational requirements in the proposed new operating environment. Traffic patterns, labor agreements, regulatory guidelines, operating rules, and the consolidation and elimination of facilities all influence staffing requirements. Because staffing and workload projections are estimates based on an overall strategy for a proposed merger or acquisition, these projections tend to change as integration planning proceeds.

In addressing staffing levels, railroads need to consider requirements both immediately following a merger and after integration. A railroad merger or acquisition requires proper planning to ensure adequate labor force levels and the availability of properly trained staff given the fc wing:

- Experienced staff and managers may relocate or retire.
- New or transferred staff and managers must receive training.
- Unanticipated staff shortages may arise, placing unreasonable workloads on employees.

#### 6.3.12 Training

Training is critical to a successful merger or acquisition, particularly when operating rules, procedures, operating practices, reporting requirements, and collective bargaining agreements vary among the merging railroads. Effectively delivered, training ensures that all employees develop the knowledge and skills necessary to perform their jobs efficiently and safely. Experience has shown that satisfactory availability of adequately trained employees is important to avoid operational problems that can have safety consequences.

#### 6.3.13 Implementation Monitoring and Feedback

A railroad's safety integration tasks are diverse and range from providing employee training to ensuring that locomotives compatible with the proper signal systems are available. These integration efforts involve many individuals and teams with interdependent tasks. Monitoring and feedback are important in ensuring that the Applicants properly execute their Safety Integration Plans and that the Applicants identify and correct deficiencies in the Plans or their execution. Therefore, safety integration planning in this case addresses mechanisms for the Applicants to monitor progress and evaluate their status. These mechanisms are intended to ensure that the Applicants' safety integration efforts are sequenced appropriately, completed properly, and are responsive to ongoing changes in conditions.

# 6.3.14 Corporate Culture's Safety Implications

If the Board approves the proposed Conrail Acquisition, the Applicants must effectively integrate employees from separate organizations with distinct corporate cultures. Five main elements of corporate culture include corporate history, corporate structure, employee behavior, management actions, and management systems. The management systems include hiring, termination, supervision, discipline and reward practices.

A company's profile in each of these five elements defines its culture, which in turn provides a framework for all cultural elements, including safety. Safety culture primarily refers to the way in which a company's management and employees view and approach various safety issues. A railroad's safety culture depends on the degree of commitment from employees on safety issue management, the degree of employee involvement in the decision-making process, the complexity of combining two different cultures, and the railroad's style of management and its effect on employee attitudes toward safety.

#### 6.3.15 Information Technology

Information Technology (IT) consists of hardware, software, and the linkages among those systems. The systems support administrative (human resources, finance, and marketing), operational (train, car, and locomotive scheduling), and maintenance (track, equipment, and signal inspection records) processes within the railroad. IT systems also support signal systems, train dispatchers, and train control centers. IT systems that support signal, dispatching, and train-control functions have a direct influence on safety.

If the Board approves the proposed Conrail Acquisition, the Applicants must accomplish effective integration activities of their IT systems to prevent the following types of difficulties:

- Improper response to a hazardous . a erials release.
- Improper routing of high and wide loads.
- Inaccurate training records that could affect staff assignments.
- Inadequate backup plans during change over, including provisions to maintain orphan systems.
- Unforeseen hardware or software incompatibilities of the merging railroads.
- Communications link failures.

- Inadequate IT manpower to staff integration efforts, such as programming and additional training of system maintenance staff and system users, and reversing outsourcing arrangements.
- Service and operating plan shortcomings that promote circumstances conducive to accidents.

#### 6.4 SUMMARY OF COMMENTS REGARDING SAFETY INTEGRATION PLANS

As noted, SEA included the Applicants' Safety Integration Plans as part of the Draft EIS to allow wide distribution of the Safety Integration Plans and give FRA, the public, and the Applicants the opportunity to review and comment. SEA received comments from USDOT, state and local governments, labor unions, non-Applicant railroads and shippers, the general public, and the Applicants. The comments are reproduced in Appendix A, "Comments Received on the Draft EIS." This section presents a summary of SEA's analysis, acknowledgment, and understanding of the issues, arguments, and statements contained in the comments. Section 6.5.1, "Responses to Comments," explains SEA's responses to the principle issues and arguments raised by the comments.

#### 6.4.1 U.S. Department of Transportation

USDOT addressed the Safety Integration Plans in both its comments on the Draft EIS and its brief on the Merits filed February 23, 1998. In its comments, USDOT explained the following:

- 1. FRA held a series of meetings with the Applicants to produce Safety Integration Plans that are responsive to USDOT safety concerns. During those meetings, FRA provided the Applicants with Safety Integration Plan guidelines.
- 2. The Safety Integration Plans adequately address the safety items required by FRA in a reasonable manner. The Applicants identify significant safety issues and provide a detailed approach to integration through the implementation of a logical sequence of events involving detailed workforce and resource allocations that employ sound industry/engineering practices.
- 3. The Applicants are working in conjunction with FRA to develop specific plans regarding issues such as differences in management styles and operations among CSX, NS, and Conrail; operational changes in all areas that the implementation of the proposed Conrail Acquisition would affect, and appropriate staffing to ensure safety.
- 4. The Safety Integration Plans demonstrate that the Applicants have systematically considered and established procedures for integrating all potentially significant sources of increased safety risk. These sources include differences in employee cultures. These differences have required (a) establishment of adequate lines of communication among management, labor, and field personnel; (b) prevention of harassment and intimidation; and (c) provision for adequate training for employees.

- 5. The Safety Integration Plans account for the increase in size and train volumes that would occur on specific rail line segments if the Board approves the proposed Conrail Acquisition. In addition, they safely and satisfactorily address the differences in operating procedures and take advantage of the "best practices" and unique strengths of each carrier.
- 6. FRA has held discussions with the Applicants to match specific timing and resource allocations to each safety action item identified in the Safety Integration Plans. FRA is satisfied with the commitments made to date and recognizes that safety integration must be an ongoing process. FRA will continue to work with the Applicants to address implementation issues as they arise.
- 7. The Applicants' commitments to cooperate with FRA, the accountability embodied in agreed-upon resource allocations, and the Safety Integration Plans themselves have put FRA in a position to ensure that the Applicants implement the Safety Integration Plans in a timely manner, consistent with existing railroad safety laws.
- 8. Although USDOT believes no further mitigation is necessary or appropriate, the agency requests that SEA and/or the Board consult with FRA to the extent they may consider comments of other parties inconsistent with USDOT findings.

#### 6.4.2 State and Local Government

Representatives of a number of communities—including the City of Berea, the City of Cleveland, the City of New Orleans, the City of Dayton, the Four City Consortium, Allegheny County, Ohio's 20<sup>th</sup> Senate District, and the Capital District Transportation Committee, submitted comments addressing the Safety Integration Plans. The comments raise concerns in such areas as:

- Workforce. The proposed Conrail Acquisition would result in decreased availability of qualified signal maintainers and maintenance-of-way personnel to conduct safety-related activities.
- Train Traffic Increase. Higher levels of train traffic and commensurate increases in hazardous materials transport would cause increased risks to public safety and environmental resources.
- Level of Detail and Implementation Requirements. The Safety Integration Plans are general and without the detail necessary to thoroughly address safety integration topics. The requirements for the Applicants to implement the Safety Integration Plans, including Board oversight, is not detailed.

#### 6.4.3 Non-Applicant Railroads and Transit Authorities

The National Railroad Passenger Corporation (Amtrak) owns most of the Northeast Corridor and some connecting lines over which Conrail operates freight service. Amtrak raised a number of issues regarding signals and train control, but it does not believe that any compromise on safety would occur on the Northeast Corridor. Amtrak commented on the Applicants' plans to cooperate with the development of the Advanced Civil Speed Enforcement System (ACSES), stated its requirement that Applicants operating over the Northeast Corridor operate ACSEScompatible equipment, and acknowledged the Applicants' representations that operations will conform to ACSES requirements. Amtrak noted favorably that the Applicants intend to conduct certain operations under Northeast Operating Rules Advisory' Committee (NORAC) rules following the proposed Conrail Acquisition. Amtrak expressed concern, however, that the Applicants may adopt different rules in the future and stated that the Board's approval should be required to do so.

The Southeast Pennsylvania Transportation Authority (SEPTA) commented that the Applicants' Safety Integration Plans did not fully address the issues related to the ramifications of routing freight traffic through SEPTA's heavily utilized Main Line and the alteration of the present freight operations in the region. In addition, SEPTA cited a number of inconsistencies in the Safety Integration Plans regarding ownership of lines and operating rights in this area and concerns with many of the planned dispatching changes.

The Washington Metropolitan Area Transit Authority referenced FRA's recent Safety Assurance and Compliance Program report regarding CSX and expressed concern that freight train traffic increases could impact passenger rail safety.

#### 6.4.4 Labor Unions

Labor unions including the Transportation Communications Union, the Allied Rail Unions, the Brotherhood of Maintenance-of-Way Employees, the Brotherhood of Locomotive Engineers, and the Brotherhood of Railroad Signalmen submitted comments related to the Safety Integration Plans. The unions expressed the following concerns:

- A sufficient number of properly trained personnel may not be available for safety-related activities such as crew calling, freight car inspections and air brake tests requiring employees to work excessive hours.
- The Safety Integration Plans do not adequately address safety issues such as air brake inspections related to the practice of block-swapping.
- The Applicants' intent to use "New York Dock" arbitration to resolve labor disputes, where labor now perceives it rarely prevails, would reduce employee morale and adversely affect safety culture.

- The expected decrease in maintenance-of-way personnel and related reduction in track, bridge, and infrastructure maintenance could increase derailments.
- Plans to establish large seniority districts would decrease the ability of maintenance personnel to address safety-related activities.
- The plans for training and qualifying personnel with regard to new rules and coordinating activities such as dispatching and maintenance-of-way work are not sufficient.
- The plans to train and familiarize locomotive engineers with regard to new territories are not sufficient.
- The Applicants have not given adequate attention to the relationship of the labor relations cultures to the safety culture. The Applicants have not made a realistic assessment of existing labor relations and have not adequately prepared for integration activities, including clashes in culture resulting from geographic issues of customs, languages, and understandings.
- The effectiveness of, and communication with, the signal maintainers' service desk.
- The adequacy of manpower for handling of signal trouble calls and train dispatching.

#### 6.4.5 Shippers and Other Parties

E.I. DuPont De Nemours & Company, Inc. (DuPont), a major shipper of hazardous materials, stated that it has met with the Applicants regarding their Safety Integration Plans and anticipates future meetings. It commented that the Safety Integration Plans contain an excellent overview of the Applicants' plans for a seamless transition but that many specific implementation details are not yet included. DuPont encouraged adoption of the best operating practices already in place at Conrail and consideration of the Chemical Manufacturers Association's Responsible Care \* Partnership Program.

Individuals also submitted comments on the Safety Integration Plans. Individual commentors included Mr. Robert W. McKnight, who commented favorably on the Applicants' plans regarding highway/rail at-grade crossings; Mr. Saul J. Stone, who expressed a wish that the Columbus, Ohio, signal facility remain open; and Mr. Belknap Freeman, who expressed concerns about crew qualifications and overall electrical operating instructions, as well as signaling and speed control.

Three Northeast Ohio-based community organizations—United WE-CAN!, BOLD, and United Pastors in Mission—expressed concern about the effect of the proposed Conrail Acquisition on the City of Cleveland. They proposed a Regional Rail Summit to allow the most affected communities to debate the issues associated with the proposed Conrail Acquisition and to agree on a unified response. They opposed the proposed Conrail Acquisition because of increased

hazardous materials transport, the potential elimination of safety and maintenance jobs, and an insufficient number of FRA inspectors.

The Northeast Ohio Areawide Coordinating Agency stated that the Board should require more detail in the Applicants' Safety Integration Plans.

The National Industrial Transportation League commented on the importance of information technology systems integration. The National Industrial Transportation League noted its settlement agreement with both CSX and NS, stipulating that CSX and NS will advise the Board prior to "Day One" that management information systems are in place to manage operations on the former Conrail system, the Shared Assets Areas, and at interchanges between the CSX/Conrail and NS/Conrail systems.

#### 6.4.6 CSX and NS

CSX pointed out that its Safety Integration Plan effort is unprecedented in rail merger proceedings. CSX noted that it has been engaged in detailed safety integration planning for the proposed Conrail Acquisition since the spring of 1997. CSX stated that it had one of the industry's highest levels of safety and that the proposed Conrail Acquisition would have no detrimental impact on safety. CSX stated that because its safety record is better than Conrail's, the accident risk on the Conrail line segments allocated to CSX should decrease if CSX continues to meet its current safety standards.

NS stated that it has been planning Acquisition-related integration activities since the spring of 1997. NS noted that safely integrating its operations and activities with those of Conrail would be a key factor in maintaining and improving the safety of railroad operations and that NS continues to consult with FRA regarding the Safety Integration Plans. NS noted that it recently earned the E.H. Harriman Memorial Gold Award for employee safety for the eighth straight year and that NS strongly believes that safety is good business. NS further commented that applying either NS's or CSX's accident rate to the new lines reduces the number of projected future accidents.

NS acknowledged that a skilled workforce is critical and asserted that it is committed to employing sufficient Conrail employees to ensure the retention of essential institutional knowledge. NS presented plans regarding dispatching employees and commented that it "plans to keep the same regional dispatching system in place to minimize the potential for disruption or disorientation, thereby ensuring that dispatchers are familiar with their territories."

NS commented that hazardous materials transport safety is a high priority and noted its participation in a number of voluntary programs such as Responsible Care<sup>®</sup> and the North America Non-Accident Release Program. NS commented that it would provide each county with emergency response plans for distribution to local response organizations and a 24-hour toll-free phone number, which local emergency response organizations along key routes and major key routes could access. NS cited its efforts to address the causes and consequences of hazardous materials spills in yards and during transport. In particular, NS commented on plans

for integrating NS's and Conrail's information technology systems to store and categorize information on hazardous materials releases. NS stated that, as noted in its Safety Integration Plan, "NS intends to adopt the Conrail framework (including the Transportation Incident Severity Index process used by Conrail) for systematic categorization of shipper-caused releases."

NS commented regarding passenger operations and stated that "NS and CSX are both experienced in safely handling passenger operations on their systems and in working cooperatively with Amtrak and other passenger rail agencies to enhance safety. NS and CSX have achieved outstanding safety records in this area." NS further stated, "Notably, neither Amtrak nor any commuter agency has claimed that the Transaction will have any detrimental impact on the safety of their operations on any NS lines. Nor have any passenger groups claimed that the Transaction will impair in any way the safe operations of passenger trains on any NS lines."

#### 6.5 SEA'S CONCLUSIONS

#### 6.5.1 Responses to Comments

SEA has carefully reviewed all the comments addressing safety integration. As a result of those efforts and discussions with the Applicants and FRA, SEA recommends that the Board include two conditions regarding safety integration with any approval of the proposed Conrail Acquisition. These conditions are presented in Section 6.5.2, "Recommended Conditions."

SEA does not believe that any other environmental conditions in this area are warranted. SEA recognizes that some comments received on the Draft EIS raise safety integration issues that have not yet been fully addressed and that certain safety integration concerns still remain regarding the proposed Conrail Acquisition. However, this is largely because of the ongoing nature of safety integration and the fact that the Safety Integration Plans issued with the Draft EIS had not been fully developed. SEA concludes that the ongoing monitoring and enforcement process described in the MOU provides an effective way to address safety integration issues that may arise in the event the Board approves the proposed Conrail Acquisition. These monitoring and enforcement activities will assure the successful combination of the Applicants' infrastructure, equipment, personnel, and operating practices. SEA bases these conclusions on the following:

- 1. SEA's review of the Applicants' Safety Integration Plans.
- 2. USDOT's review and finding that the Safety Integration Plans address and safely and satisfactorily mitigate every safety concern raised in the environmental review portion of the proposed Conrail Acquisition and that no other mitigation on the subject is necessary or appropriate. More specifically, USDOT stated that FRA concludes that the Applicants have systematically considered and established procedures for integrating all potentially significant sources of increased safety risk including (a) perceived differences in employee cultures; (b) differences in railroad management and operating procedures;

(c) loss of institutional knowledge; and (d) the increase in the size of the two major railroad systems, including train volumes, and potential workloads for management and labor. FRA is satisfied with the commitments made to date and will continue to work with the Applicants to address implementation issues as they arise.

- 3. The Board and FRA MOU agreement (with concurrence by USDOT) that creates a cooperative oversight process to provide ongoing monitoring, evaluation, and review of the Safety Integration Plans. This process will ensure that the Applicants' Safety Integration Plans are modified and updated as necessary to adapt to changing conditions during the Applicants' implementation of Acquisition-related activities.
- 4. SEA's inclusion of recommended mitigation measures in Chapter 7, "Recommended Environmental Conditions," that relate to and address issues raised by commentors in the context of safety integration, including mitigation that would address highway/rail atgrade crossing safety, freight/passenger rail traffic safety, and hazardous materials transport safety.
- 5. The Applicants' comments acknowledging the challenges of Acquisition-related safety integration, explaining the level of effort they have devoted to safety integration, and stating their existing operating practices to reduce the potential for accidents.
- 6. The Applicants' continuing Safety Integration Plan development since their December 3, 1997, submittals to the Board. The Applicants would also have to comply with various existing FRA regulations that apply uniformly to all railroads, in the event the Board approves the proposed Conrail Acquisition. These regulations address areas where commentors raised concerns. For example:
  - Railroads must file their operating rules for review by FRA. Further, they must also provide employees with periodic instruction regarding those rules, according to a plan that they must file with FRA.
  - FRA regulations at 49 CFR Parts 233 through 236 contain detailed requirements for the design, installation, inspection, and maintenance of signals, communications, train-control systems, and grade crossing signal systems. These regulations address safety problems that could arise from inconsistent engineering practices, poor records, or a lack of responsiveness in correcting signal faults.
  - Regarding air brake issues and concerns, FRA regulations contain detailed requirements for predeparture and en route testing and inspections of locomotives, freight cars, and freight trains. These regulations provide FRA with authority to oversee locomotive, freight car, and freight train inspections and tests, including inspector qualifications and brake testing after block-swapping.

- FRA safety oversight provides a further safeguard against a degradation in safety because of inadequate track inspection and maintenance. FRA has authority to regulate track safety derived from the Track Safety Standards at 49 CFR Part 213. These standards specify inspection requirements and minimum acceptable track standards for different speeds of operation. FRA normally includes track condition, as well as maintenance and inspection practices in Safety Assurance and Compliance Program reviews.
- Finally, FRA's recent final rule on passenger train emergency preparedness includes standards for freight railroads hosting the operation of passenger trains.
- 7. The settlement agreement that the Applicants negotiated with the National Industrial Transportation League relative to service. The settlement agreement established a process for periodic discussions between the Applicants and shippers to ensure a smooth service transition. One provision of that agreement is that the Applicants will not attempt to integrate operations until management information systems have been integrated and demonstrated to work smoothly.
- 8. Corporate safety culture, information technology, dispatching, workload, staffing, and training are prominent topics in the FRA Safety Integration Plan guidelines and have a corresponding tracking system requirement in the FRA Safety Integration Plan accountability matrices. This provides a means to address these issues as FRA continues to work with the Applicants to address implementation issues as they arise.
- 9. The Applicants amplified the discussion on signals, communications, and train control issues in their comments on the Draft EIS. For example, NS recognized the legal, contractual, and operating rules' requirements to use locomotives equipped with Automatic Train Control (ATC) where required by timetable. NS committed to providing all necessary training, tests, maintenance, and management support needed to follow through in this area. CSX plans to expand the number of locomotives available to operate on ATC-equipped lines. CSX also indicated its willingness to cooperate with Amtrak and commuter agencies regarding application of the Advanced Civil Speed Enforcement System on the Northeast Corridor.
- 10. The Applicants' Safety Integration Plans state that, with regard to track and structures, improved productivity of their system gangs would offset most of the planned track maintenance staff reductions. System gangs would work in southern areas of each railroad during the winter and northern areas during the summer, eliminating the winter layoff and maintaining consistency of system gang skills and efficiency. In addition, system gangs on the proposed expanded NS and CSX railroads would perform heavy maintenance on track in the Shared Assets Areas. The operator of the Shared Assets Areas would employ only basic track maintenance and inspection staff. Along with these planned maintenance procedure changes, CSX and NS would consolidate some workshops that service and rehabilitate track maintenance equipment. In addition, CSX and NS have stated that they would implement an adequate inspection and maintenance

program to ensure that bridges remain in safe condition. Thus, SEA does not believe that a reduction in the amount of maintenance performed or deterioration in track quality would likely occur.

#### 6.5.2 Recommended Conditions

Based on its review of available information and consideration of comments from USDOT, the public, the Applicants, and other parties, SEA recommends that any final Board decision approving the proposed Conrail Acquisition include the following conditions:

#### **Recommended Safety Integration Condition 1**

The Applicants shall comply with the Safety Integration Plans, which may be modified and updated as necessary to respond to evolving conditions.

#### **Recommended Safety Integration Condition 2**

The Applicants shall participate and fully cooperate with the ongoing regulatory activities associated with the safety integration process, as described in the MOU agreed to by the Board and FRA with the concurrence of USDOT, until FRA affirms to the Board in writing that the integration of the Applicants' systems has been completed safely and satisfactorily.

These recommended safety integration conditions are included, along with all other SEArecommended mitigation, in Chapter 7, "Recommended Environmental Conditions."

## MEMORANDUM OF UNDERSTANDING BETWEEN THE SURFACE TRANSPORTATION BOARD AND THE FEDERAL RAILROAD ADMINISTRATION

# CSX AND NS ACQUISITION OF CONRAIL, FINANCE DOCKET NO. 33388 IMPLEMENTATION OF SAFETY INTEGRATION PLANS

WHEREAS, the United States Department of Transportation (USDOT) filed comments with the Surface Transportation Board (Board) reflecting the concern of the Federal Railroad Administration (FRA), the agency within USDOT responsible for enforcement of railroad safety regulations, about the effect that the proposed acquisition of Conrail by CSX and NS (Conrail Acquisition) might have on rail safety, and FRA's recommendation that the board require CSX and NS to develop plans detailing the procedures each would follow to integrate the part of Conrail it is acquiring into its operations in a manner that will maintain safety at every step of the process in the event that the acquisition is approved by the Board; and

WHEREAS, the Board, in its Decision No. 52 issued on November 3, 1997, directed Applicants CSX and NS, and Conrail to the extent it will be responsible for operation in the Shared Assets Areas, to prepare and submit to the Board detailed Safety Integration Plans (SIPS) explaining the process by which they intended to integrate Conrail into their operations, in the event the Board approved the proposed Conrail Acquisition; and

WHEREAS, working closely with FRA, the carriers developed the SIPS and submitted them to the Board on December 3, 1997. The Board's Section of Environmental Analysis (SEA) included the SIPS in the Draft EIS for the proposed Conrail Acquisition to provide an opportunity for

6.6
review and comment by FRA and the public and SEA has carefully reviewed the plans and comments; and

WHEREAS, DOT's comments on the Draft EIS state that FRA is satisfied that the SIPS address and satisfactorily mitigate every safety concern raised in the environmental review portion of the pending Conrail Acquisition proceeding and that no other mitigation on this subject is necessary or appropriate. In addition, DOT's comments state that FRA is satisfied with the Applicants' commitments made to date and that, in the event the Board approves the Conrail Acquisition, FRA will continue to work as appropriate with the Applicants to address integration issues that arise; and

WHEREAS, the FRA and the Board wish to enter into a memorandum of understanding (MOU) to clarify the actions each will take to assure the successful implementation of the SIPs.

NOW, THEREFORE, in the event the Board approves the Conrail Acquisition, in consideration of the premises and the mutual undertakings hereafter set forth, the FRA and the Board do hereby agree as follows:

 Both FRA and the Board recognize that safety integration is an ongoing process that involves both agencies. Accordingly, FRA will exercise its authority over rail safety matters to monitor, evaluate and review the Applicants' progress in implementing their SIPs.

- 2. FRA will keep the Board informed of the Applicants' progress. If deemed necessary by FRA, FRA may request the Board to exercise its oversight authority over the Applicants and take action to correct identified deficiencies and address safety problems arising out of the approved transaction. FRA will be responsive to the requirements of public safety and the safe implementation of post-acquisition rail operations by the Applicants.
- 3. In those circumstances where FRA informs the Board of a concern that may require Board action, FRA will provide sufficient information to the Board to identify the safety deficiency, describe the implications of the deficiency, and provide recommendations for correcting the deficiency.
- 4. FRA agrees to report significant safety integration issues to the Board if and when they occur. FRA also will report to the Board from time to time, as FRA deems appropriate, but not less than biannually, regarding safety integration of the Conrail Acquisition. FRA's reporting will continue until safety integration implementation has been completed to the satisfaction of FRA, and FRA affirms to the Board in writing that the proposed integration has been completed satisfactorily.

## Chapter 6: Safety Integration Planning

IN WITNESS HEREOF, the parties hereto have executed this MOU on this \_\_\_\_\_ day of May,

1998.

Henri F. Rush General Counsel Surface Transportation Board S. Mark Lindsey Chief Counsel Federal Railroad Administration

The Department of Transportation concurs in this memorandum of understanding.

Nancy E. McFadden General Counsel U.S. Department of Transportation

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## SURFACE TRANSPORTATION BOARD Finance Docket No. 33388

CSX Corporation and CSX Transportation, Inc. Norfolk Southern Corporation and Norfolk Southern Railway Company Control and Operating Leases/Agreements Conrail Inc. and Consolidated Rail Corporation

## **GUIDE TO THE FINAL ENVIRONMENTAL IMPACT STATEMENT**

This Final Environmental Impact Statement (Final EIS) evaluates the potential environmental impacts that could result from the proposed Acquisition of Conrail Inc. and Consolidated Rail Corporation (Conrail) by CSX Corporation and CSX Transportation, Inc. (CSX) and Norfolk Southern Corporation and Norfolk Southern Railway Company (NS). The Surface Transportation Board's (Board) Section of Environmental Analysis (SEA) has prepared this document in accordance with the requirements of the National Environmental Policy Act (NEPA) of 1969, as amended (42 U.S.C. 4321); the Council on Environmental Quality (CEQ) regulations implementing NEPA; the Board's environmental rules (49 CFR Part 1105); and other applicable environmental statutes and regulations.

SEA issued the Draft EIS on December 19, 1997. Subsequently, SEA issued an Errata (January 12, 1998) and a Supplemental Errata (January 21, 1998) to clarify statements and analyses in the Draft EIS. The 45-day public comment period closed February 2, 1998. This Final EIS provides responses to comments, questions, and issues that the public, agencies, and other document reviewers raised. It describes SEA's additional environmental analysis and includes SEA's final environmental mitigation recommendations to the Board.

To assist the reader in the review of this document, each volume contains a Guide to that volume and a Table of Contents for each chapter in that volume. In addition, each individual volume also contains a Guide to the Final EIS, a Glossary of Terms, a List of Acronyms and Abbreviations, and the Table of Contents of the Final EIS. Specifically, the Final EIS document includes the following volumes:

## **Executive Summary Volume**

The Executive Summary provides an overview of the proposed Conrai! Acquisition, including the potential environmental impacts and the mitigation measures that SEA recommends to address those impacts. In addition, the Executive Summary Volume contains the Letter to Interested Parties that SEA attached to copies of this Final EIS, the Information Sources that SEA used for preparing both the Draft EIS and the Final EIS documents, and the Index of keywords and phrases that appear in this Final EIS.

## Volume 1: Chapters 1, 2, and 3

- Chapter 1, "Introduction and Background," describes the purpose and need for the
  project, the proposed action, and the alternatives to the proposed action. It also sets forth
  the jurisdiction of the Board and outlines SEA's environmental review process. In
  addition, this chapter presents an overview of SEA's agency coordination and the public
  comment process.
- Chapter 2, "Scope of the Environmental Analysis," identifies the proposed Conrail Acquisition-related activities that SEA analyzed. This chapter includes a table presenting the thresholds SEA used to identify activities for environmental analysis and explains project activities that differ from those set forth in the Draft EIS.
- Chapter 3, "Agency Coordination and Public Outreach," describes SEA's public outreach activities to notify interested parties and environmental justice populations of the potential environmental impacts of the proposed Conrail Acquisition and of the availability of the Draft EIS and the Final EIS. Additionally, the chapter explains SEA's distribution of the Draft EIS and the Final EIS, explains the methods that SEA used to facilitate the public comment process, and describes the agency coordination that SEA performed as part of the environmental review process. Chapter 3 also reviews the historic properties outreach activities that SEA conducted in Ohio.

### Volume 2: Chapter 4

 Chapter 4, "Summary of Environmental Review," outlines the additional environmental analysis that SEA conducted for each environmental issue area since preparation of the Draft EIS. Specifically, it explains the methods of analysis, presents the public comments and additional evaluations, identifies the results of the analysis, and reviews SEA's assessment of environmental impacts. In addition, this chapter describes SEA's refinement of the mitigation measures recommended in the Draft EIS, SEA's final recommended mitigation measures, anticipated environmental benefits, and the adverse environmental impacts of the proposed Conrail Acquisition.

### Volume 3: Chapter 5

• Chapter 5, "Summary of Comments and Responses," contains summaries of the comments that SEA received on the Draft EIS and SEA's responses to the comments. The chapter provides the following: (a) an overview of the comments, including those

from Federal agencies, the Applicants, and national and regional groups as well as groups and individuals within specific states; (b) general comments on the Draft EIS, including the Application review process, the environmental review process, and the system-wide technical analysis; and (c) comments on state and community issues, organized by state and environmental issue category.

### Volume 4: Chapter 6

Chapter 6, "Safety Integration Planning," sets forth the purpose and topics of the Safety Integration Plans and presents summaries of comments that reviewing agencies and the public submitted about the Safety Integration Plans. The chapter also includes SEA's analysis and response to those comments and provides SEA's conclusion and recommended conditions regarding the Safety Integration Plans.

### Volume 5: Chapter 7

Chapter 7, "Recommended Environmental Conditions," describes the final environmental mitigation conditions that SEA recommends to address significant adverse environmental impacts that could result from the proposed Conrail Acquisition.

### Volume 6: Appendices

These four volumes (6A through 6D) include appendices containing the comments on the Draft EIS and the analysis by the technical disciplines as well as appendices containing public outreach and agency consultation information and documents.

Volume 6A contains the following appendix:

A. Comments Received on the Draft Environmental Impact Statement.

Volume 6B contains the following appendices:

- B. Draft Environmental Impact Statement Correction Letter, Errata, Supplemental Errata and Additional Environmental Information, and Board Notices to Parties of Record.
- C. Settlement Agreements and Negotiated Agreements.
- D. Agency Consultation.
- E. Safety: Highway/Rail At-Grade Crossing Safety Analysis.
- F. Safety: Hazardous Materials Transport Analysis.
- G. Transportation: Highway/Rail At-grade Crossing Traffic Delay Analysis.
- H. Transportation: Roadway Systems Analysis.
- I. Air Quality Analysis.

### Volume 6C contains the following appendices:

- J. Noise Analysis.
- K. Cultural Resources Analysis.
- L. Natural Resources Analysis.
- M. Environmental Justice Analysis.

### N. Community Evaluations.

Volume 6D contains the following appendices:

- O. EPA Rules on Locomotive Emissions.
- P. SEA's Best Management Practices for Construction and Abandonment Activities.
- Q. Example Public Outreach Materials.
- R. All Relevant Board Decisions.
- S. Index for the Draft Environmental Impact Statement.
- T. Final Environmental Impact Statement Rail Line Segments.
- U. List of Preparers.

#### **Addendum Volume**

The Addendum contains information SEA did not include in the other portions of the Final EIS because of production timing constraints. The Addendum contains SEA's evaluation and additional analyses SEA conducted for train traffic rerouting proposed as mitigation for the Greater Cleveland Area. The Addendum also contains additional analysis of the proposed connection in Alexandria, Indiana (one of the Seven Separate Connections) as well as comments received during an additional comment period and summaries of, and responses to, those comments.

## **GLOSSARY OF TERMS**

#### abandonment:

The discontinuance of service on a rail line segment and the salvaging and/or the removal of railroad-related facilities for reuse, sale, and/or disposal.

Acquisition:

The proposal by CSX, NS, and Conrail to acquire control of Conrail's assets and its basic railroad operations.

#### active warning devices:

Traffic control devices that give positive notice to highway users of the approach or presence of a train. These devices may include a flashing red light signal (a device which, when activated, displays red lights flashing alternately), a bell (a device which, when activated, provides an audible warning, usually used with a flashing red light signal), automatic gates (a mechanism added to flashing red light signals to provide an arm that can lower across the lanes of the roadway), and a cantilever (a structure equipped with flashing red light signals and extending over one or more lanes of traffic).

Advanced Civil Speed Enforcement System (ACSES): A supplement to the Automatic Cab Signal (ACS) and Automatic Train Control (ATC) systems currently in place within the Northeast Corridor (NEC), ACSES uses a series of transponders to communicate location and other factors to passing trains whose on-board computers utilize the information to achieve system function. These functions include: (1) civil speed enforcement; (2) temporary speed enforcement, including protection of roadway workers; and (3) enforcement of positive stop at interlocking home signals and Control Points (CPs). adverse environmental impact:

Advisory Council on Historic Preservation (ACHP):

air-brake test:

Allied Rail Unions (ARU):

**Applicants:** 

**Application:** 

A negative effect, resulting from the implementation of a proposed action, that serves to degrade or diminish an aspect of human or natural resources.

An independent Federal agency charged with advising the President and Congress on historic preservation matters and administering the provisions of Section 106 of the National Historic Preservation Act.

A test made prior to train departure, required by Federal Railroad Administration regulations and by railroad rules to ensure that a train's air-brake system is functioning as intended and that certain devices are within prescribed tolerances and physical parameters.

A group of unions representing railroad employees, including the Brotherhood of Locomotive Engineers, the Brotherhood of Railroad Signalmen, and the Brotherhood of Maintenance-of-Way Employees.

CSX Corporation and CSX Transportation, Inc. (CSX), Norfolk Southern Railway Company and Norfolk Southern Corporation (NS), and Conrail Inc. and Consolidated Rail Corporation (Conrail).

A formal filing with the Surface Transportation Board related to railroad mergers, acquisitions, constructions, or abandonments. Applications may be either Primary Applications or Inconsistent and Responsive (IR) Applications. See Primary Application and Inconsistent and Responsive (IR) Application. Area of Potential Effect(s) (AoPE): The geographic area surrounding a rail activity where an individual (or resource) or group of individuals (or resources) could likely experience adverse environmental effects. For this Final EIS, where applicable, the different technical disciplines determined their own specific definitions of this term for their individual technical disciplines.

attainment area:

An area that EPA has classified as complying with the National Ambient Air Quality Standards specified under the Clean Air Act.

Maximum permitted speed for a specific train at a specific

location, taking into account the prevailing weather conditions (for example, restrictions due to heavy rain, extreme heat or

authorized speed:

Automatic Block System (ABS):

cold).

Automatic Train Control (ATC):

Best Management Practice (BMP): A series of railroad signals that indicate track occupancy in the block (length of track of defined limits) ahead and govern the use of a consecutive set of blocks by a train. These signals include wayside track signals and cab signals (signals displayed in the locomotive cab instead of, or in addition to, wayside track signal displays), or both. This system combines automatic detection of train position with control of signals.

A system that has components installed on both trains and tracks that, when working together, will cause the train brakes to apply automatically if the engineer fails to respond to a condition requiring train speed to be reduced.

Technique that various parties (for example, the construction industry) use to provide protection from adverse impacts to the environment. The Board may designate these techniques as mitigation measures. block group: A small population area that the U.S. Census Bureau uses to measure and record demographic characteristics. The population of a block group typically ranges from 600 to 3,000 people and is designed to reflect homogeneous living conditions, economic status, and population characteristics. Block group boundaries follow visible and identifiable features, such as roads, canals, railroads, and above-ground high-tension power lines.

block swapping:

The process of moving groups of cars with a common destination (called "blocks") from one train to another.

The Surface Transportation Board, the licensing agency for the proposed Conrail Acquisition.

Documents addressed to train crews and other operating employees specifying temporary or local operating rules and restrictions.

System that provides signal indications in the locomotive cab instead of, or in addition to, wayside signal displays.

A unit of measure used to describe commodities transported on a railroad typically in a boxcar, tank car, flat car, hopper car, or gondola.

A signal system that allows for the movement of trains in either direction on designated tracks at the maximum authorized speed, in accordance with the wayside or cab signals or both.

Small, relatively permanent statistical subdivisions of a county containing between 2,500 and 8,000 persons. The U.S. Bureau of Census designs census tracts to reflect homogeneous living conditions, economic status, and population characteristics.

Board:

bulletins:

cab signaling:

carload:

centralized traffic control system:

census tract:

Clean Air Act (Clean Air Act Amendments): The Clean Air Act of 1970 and the subsequent amendments, including the Clean Air Act Amendments of 1990 (42 U.S.C. 7401-7671g); the primary Federal law that protects the nation's air resources. This act establishes a comprehensive set of standards, planning processes, and requirements to address air pollution problems and reduce emissions from major sources of pollutants.

**Clean Water Act:** 

The Federal Water Pollution Control Act Amendments of 1972 (33 U.S.C. 1251 *et seq.*;) is the primary Federal law that protects the nation's waters, including lakes, rivers, aquifers, and coastal areas. This act provides a comprehensive framework of standards, technical tools, and financial assistance to address the many causes of pollution and poor water quality, including municipal and industrial wastewater discharges, polluted runoff from urban and rural areas, and habitat destruction. Specifically, the Clean Water Act provides for the following:

- Requires major industries to meet performance standards to ensure pollution control.
- Charges states and tribes with setting specific water quality standards appropriate for their waters and developing pollution control programs to meet them.
  - Provides funding to states and communities to help them meet their clean water infrastructure needs.
- Protects valuable wetlands and other aquatic habitats through a permitting process that conducts land development activities and other activities in an environmentally sound manner.

### coastal zone:

According to the Coastal Zone Management Act of 1972, lands and waters adjacent to the coast that exert an influence on the uses of the sea and its ecology, or whose uses and ecology the sea affects. Coastal Zone Management Act (CZMA): The Coastal Zone Management Act of 1972, as amended ((16 U.S.C. 1451-1464; P.L. 92-583), is also known as "Federal Consistency With Approved State Coastal Management Programs" (15 CFR 930). This Federal act preserves, protects, develops, and, where possible, restores or enhances the resources of the nation's coastal zone for the present and for future generations. The provisions of 15 CFR 930.30 ensure that all Federally conducted or supported activities, including development projects directly affecting the coastal zone, are consistent with approved state coastal management programs as much as possible.

collective bargaining agreement:

An agreement between a union and an employer that defines the scope of work, rates of pay, rules, and working conditions for the union's members.

common corridor:

For the purposes of this Final EIS, a railroad line segment that accommodates both public mass transportation service and passenger and freight train operations by using separate tracks adjacent to each other in the same right-of-way or area.

compensation wetlands (compensatory wetlands): Wetlands that an agency or entity creates, enhances, or preserves to mitigate for unavoidable impacts on existing wetlands that occur as a result of implementation of the agency's or entities' proposed action. These compensation (or compensatory) wetlands replace, "in kind", wetlands that an agency or entity partially or totally fills or drains during its construction or earth-moving activities.

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA):

The Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (42 U.S.C. 9601-9675; P.L. 96-510); the Federal act that provides EPA with the authority to clean up inactive hazardous waste sites and distribute the cleanup costs among the parties who generated and/or handled the hazardous substances at these sites.

May 1998 Glossary-6 Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS): Federal database containing information on potential hazardous waste sites that states, municipalities, private companies, and private persons have reported to the EPA, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act. This database contains sites that are either proposed for inclusion on, or are currently on, the National Priorities List (NPL) and sites that are in the screening and assessment phase for possible inclusion on the NPL.

condition:

A provision that the Board imposes as part of any decision approving the proposed Conrail Acquisition and that requires action by one or more of the Applicants.

conductor:

The operating employee on a train responsible for safe and efficient train movement in accordance with all railroad operating rules and special instructions.

Conrail Shared Assets Operations:

consist:

See Shared Assets Areas

The number and type of locomotives and cars included in a train, considering special factors such as the tonnage and the placement of hazardous materials cars and "high-wides" (oversize dimension cars).

constant warning time:

A motion-sensing system with the capability of measuring train speed and providing a relatively uniform warning time by warning signal devices to highway traffic at highway/rail atgrade crossings.

**Control Date:** 

The date on which the merger can become effective, following formal approval of the Board.

Council on Environmental Quality (CEQ):

craft employee:

crew caller:

Federal agency responsible for developing regulations and guidance for agencies implementing the National Environmental Policy Act.

Term applied to a railroad employee qualified in a specific railroad operating or maintenance activity (for example, locomotive engineer, train dispatcher, signal maintainer, or car inspector).

Term applied to a railroad employee who is responsible for notifying train crews when and where to report for duty.

crew calling:

next tour-of-duty will start. Labor agreements commonly specify that railroads call train crews a minimum of 2 hours before crew members are required to begin their tour-of-duty.

The specific sites within the geographical area occupied by a threatened or endangered species that include the physical or biological features essential to the conservation of the species. These areas may require special management considerations or protection. These areas include specific sites outside the geographical areas occupied by the species at the time of the listing that are essential for the conservation of the species.

Process of notifying train crew members when and where their

critical habitat:

criteria of significance:

The criteria SEA developed specifically for the proposed Conrail Acquisition to determine whether a potential adverse environmental effect is significant and may warrant mitigation.

Transverse wooden, concrete, or steel beam supporting the rails of a railroad track.

cross-tie:

#### cultural resource:

Any prehistoric or historic district, site, building, structure, or object that warrants consideration for inclusion in the National Register of Historic Places. A cultural resource that is listed in or is eligible for listing in the National Register of Historic Places is considered a historic property (or a significant cultural resource). For the purposes of this Final EIS, the term applies to any resource more than 50 years old for which SEA gathered information to evaluate its significance. In addition, this Final EIS addresses potential environmental impacts of the proposed rail line construction and abandonment activities on Native American reservations and sacred sites.

cumulative effects:

Day 1:

decibel (dB):

Effects resulting from the incremental impacts of the proposed Conrail Acquisition when added to other past, present, and reasonably foreseeable future actions, regardless of which agency (Federal or non-Federal) or person undertakes such actions, as described in 40 CFR 1508.7. Cumulative effects can result from individually minor but collectively significant actions taking place over a period of time.

In the event that the Board approves the proposed Conrail Acquisition, the date (as the Applicants determine through mutual agreement) when operating responsibility for the acquired railroad is transferred to the Applicants' organizations.

A unit of noise measured on a logarithmic scale that compresses the range of sound pressures audible to the human ear over a range from 0 to 140, where 0 decibels represents sound pressure corresponding to the threshold of human hearing, and 140 decibels corresponds to a sound pressure at which pain occurs. Noise analysts measure sound pressure levels that people hear in decibels, much like other analysts measure linear distances in yards or meters. A-weighted decibel (dBA) refers to a weighting that accounts for the various frequency components in a way that corresponds to human hearing. degradation: To change a habitat, either terrestrial or aquatic, so that it no longer meets the survival needs of a particular species of plant or wildlife. Such change could include reducing the feeding area, modifying the vegetation type, and limiting the available shelter.

> One of two types of rail equipment designed to detect imperfections in railroad track structure. Rail detector cars detect internal imperfections within the rail, using ultrasonic techniques. See also *track geometry inspection car*.

> > The railroad operating employee responsible for issuing on-

track movement and/or occupancy authority through the use of remotely controlled switches, signals, visual displays, voice control written mandatory directives, and/or all of the above.

The workstation from which a train dispatcher controls a

The process of real-time planning, supervising, and controlling

dimensional traffic: A freight shipment requiring special authorization for movement because of height, width, length, or gross weight.

specific portion of a railroad's network.

of train movements.

dispatcher (train):

detector car:

dispatcher desk:

dispatching:

disproportionality (test for):

A comparison test to assess whether potentially high and adverse impacts of an action are predominantly borne or more severe or greater in magnitude in an Environmental Justice (EJ) population than a non-EJ population within the current analysis scale (that is, at the system, state, county, segment, or block group level).

double-stack freight service: The transport of two intermodal containers stacked on top of each other on one platform of an intermodal rail flat car. double tracking:

Construction of a second railroad track immediately adjacent to an existing track, to perform railroad activities similar to those occurring on the existing track.

emergent species:

Any type of aquatic plant whose vegetative growth is mostly above the water.

emissions:

Air pollutants that enter the atmosphere.

endangered species:

A species that is in danger of extinction throughout all or a significant portion of its range. Federal and state laws protect these species.

Endangered Species Act (ESA): The Endangered Species Act of 1973 (16 U.S.C. 1531 et seq.; P.L. 93-205), as amended in 1978, is the primary Federal law protecting endangered and threatened wildlife and plant species. The purpose of the law is to provide for the conservation of habitat for such species.

engineer (railroad):

Employee responsible for operating a railroad locomotive in accordance with train-handling practices, signal indications, operating rules, speed limits, and the technical requirements of the particular locomotive.

Environmental Impact Statement (EIS): A document that the National Environmental Policy Act requires Federal agencies to prepare for major projects or legislative proposals having the potential to significantly affect the environment. A tool for decision-making, it describes the positive and negative environmental effects of the undertaking, and alternative actions and measures to reduce or eliminate potentially significant environmental impacts. Environmental Justice (EJ): For purposes of this document, SEA documes environmental justice as the mission discussed in Executive Order (EO) 12898 "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations" (59 FR 7629, February 11, 1994). This EO directs Federal agencies to identify and address "disproportionately high and adverse human health or environmental effects" of their programs, policies, and activities on minority and low-income populations in the United States. EO 12898 also calls for public notification for environmental justice populations, as well as meaningful public participation of environmental justice populations. In this document, SEA used the guidance provided in the Department of Transportation Order on Environmental Justice, the Council of Environmental Quality, Environmental Justice Guidance under the National Environmental Policy Act, and the Interim Final Guidance for Incorporating Environmental Justice Concerns in EPA's NEPA analysis to analyze potential disproportionately high and adverse impacts on environmental justice populations for rail segments, intermodal facilities, rail yards, and new construction.

Environmental Justice (EJ) population:

Environmental Resource Category: A population within an Area of Potential Effect whose minority and low-income composition meets at least one of the following criteria: (1) The percentage of minority and lowincome population in the Area of Potential Effect is greater than 50 percent of the total population in the Area of Potential Effect; or (2) The percentage of minority and low-income population in the Area of Potential Effect is at least ten percentage points greater than the percentage of minority or low-income population in the county of which the Area of Potential Effect is a part.

Any of the environmental issues that serve as the major topics of impact analysis for this EIS. Examples include land use, natural resources, noise, hazardous materials, cultural resources, water quality, or air quality.

Environmental Resource Score (ERS):	The impact score determined for an environmental resource category within a (block group) Area of Potential Effect. A typical ERS ranges from 0 to 6, reflecting the relative impact on the Area of Potential Effect compared with impacts on other Areas of Potential Effect. For the Environmental Justice analysis, SEA calculated an ERS for noise, hazardous materials transport, and traffic safety and delay.
equipment:	For a railroad, a term used to refer to the mobile assets of the railroad, such as locomotives, freight cars, and on-track maintenance machines. Also used more narrowly as a collective term for freight cars operated by the railroad.
equipment restrictions:	Operating instructions that restrict certain types of locomotives or freight cars from operating over selected line segments.
Errata:	A list of corrections to the Draft EIS, prepared to facilitate public review of the Draft EIS and to clarify some of the information contained therein.
Executive Order (EO) 12898:	Executive Order 12898, "Federal Actions to Address Environmental Justice in Minority and Low-Income Populations," issued in February of 1994; directs Federal agencies to identify and address as appropriate "disproportionately high and adverse human health or environmental effects," including interrelated social and economic effects, of their programs, policies, and activities on minority populations and low-income populations in the United States.
extra board crew caller position:	Railroad employee who does not have a regularly assigned position but who works on an on-call basis.

floodplain:	The lowlands adjoining inland and coastal waters and relatively flat areas and flood-prone areas of offshore islands, including, at a minimum, those areas that have a 1 percent or greater chance of flood in any given year (also known as a 100- year or a Zone A floodplain).
Four City Consortium:	An alliance of the cities of East Chicago, Hammond, Gary, and Whiting, Indiana.
freight car inspections:	Pre-departure tests required for railroad freight cars pursuant to Federal Railroad Administration regulations.
fugitive dust:	According to EPA regulations, those particulate matter emissions that could not "reasonably pass" through a stack, chimney, vent, or other functionally equivalent opening. Examples of fugitive dust include wind-borne particulate matter from earth-moving and material handling during construction activities.
Geographic Information System (GIS):	A computer system for storing, retrieving, manipulating, analyzing, and displaying geographic data. GIS combines mapping and databases.
grade crossing:	See highway/rail at-grade crossing.
grade separation:	See separated grade crossing.
gross tor "le:	A measure of railroad production that represents the weight of cars and freight movement in terms of total tons per mile transported system-wide or over a specific rail line segment. Specifically, 1 ton of railroad car and loading carried 1 mile.

haulage right(s):

The limited right (or combination of limited rights) of one railroad to have their freight traffic moved by another railroad over the designated lines of the other railroad.

hazardous materials:

Substances or materials that the Secretary of Transportation has determined are capable of posing an unreasonable risk to human health, safety, and property when transported in commerce, as designated under 49 CFR Parts 172 and 173.

hazardous wastes: Waste materials that, by their nature, are inherently dangerous to handle or dispose of (for example, old explosives, radioactive materials, some chemicals, some biological wastes). Usually, industrial operations produce these waste materials.

high-and-wide load: Load on a freight car that exceeds the normal height and/or width limits for general operation over a railroad. Such loads may move only with special operating precautions to prevent damage to wayside structures and trains on adjacent tracks.

high-profile crossings:

highway/rail at-grade crossing: A condition at a highway/rail at-grade crossing where the elevation of the tracks is above the elevation of the approaching roadway. This condition, generally the result of the periodic raising of the tracks for maintenance of the track bed, can affect sight distance for highway users and can become a hazard for trucks and trailers with low groundclearance. This is also referred to as "hump crossings".

The general area of an intersection of a public or private road and a railroad where the intersecting rail and highway traffic are at the same level.

#### Glossary of Terms

historic property:

Any prehistoric or historic district, site, building, structure, or object included in or eligible for inclusion in the National Register of Historic Places (NRHP). The term "eligible for inclusion in the NRHP" pertains to both properties that the Secretary of the Interior has formally determined to be eligible and to all other properties that meet NRHP listing criteria.

horn noise (train):

hours-of-service regulations:

Implementing Agreement:

Inconsistent and Responsive (iR) application:

Indian tribe:

Noise that occurs when locomotives sound warning horns in the vicinity of highway/rail at-grade crossings.

Federal Hours of Service Law, which Federal Railroad Administration enforces, governing maximum shift lengths and minimum rest periods for railroad operating employees. These employees include train crew, train dispatchers, and signal maintainers, as well as mechanical employees such as hostlers who move equipment for the purpose of test and inspection.

An agreement between a railroad company and an employee union regarding working conditions on a combined system, and specifying the corresponding seniority districts, work locations, and other terms and conditions of employment.

Proposal to the Surface Transportation Board that Parties of Record submitted prior to October 21, 1997, requesting modifications of, or alternatives to, the proposed Conrail Acquisition.

According to Indian Self-Determination and Education Assistance Act (25 U.S.C. 450-458; P.L. 93-638), any Indian tribe, band, nation, or other organized group or community recognized as eligible for the special programs and services that the United States provides to Indians because of their status as Indians. interchange point:

Point at which two or more railroads join to exchange freight traffic.

interlocking:

key route:

key train:

An arrangement of switch, lock, and signal devices that is located where rail tracks cross, join, or separate. The devices are interconnected in such a way that their movements must succeed each other in a predetermined order, thereby preventing opposing or conflicting movements.

intermodal facility: A site consisting of tracks, lifting equipment, paved and/or unpaved areas, and a control point for the transfer (receiving, loading, unloading, and dispatching) of trailers and containers between rail and highway, or between rail and marine modes of transportation.

jurisdictional wetland: Wetlands that the U.S. Army Corps of Engineers regulates under Section 404 of the Clean Water Act (33 U.S.C. 1344).

For the purposes of this Final EIS, a rail line segment that carries an annual volume of 10,000 or more carloads of hazardous material.

Any train with five or more tank carloads of chemicals classified as a Poison Inhalation Hazard (PIH), or with a total of 20 rail cars with any combination of PIHs, flammable gases, explosives, or environmentally sensitive chemicals.

The day-night average noise sound level, which is the receptor's cumulative noise exposure from all noise events over a full 24 hours. This is adjusted to account for the perception that noise at night is more bothersome than the same noise during the day.

Leg(h):

Ldn:

The hourly energy-averaged noise level.

labor relations culture:

Philosophy by which an employer and/or parties to a collective bargaining agreement conduct labor-management relations.

land use consistency:

Determination of whether the proposed Conrail Acquisition represents a change that is consistent with local land use plans in effect, based on consultation with local and/or regional planning agencies and/or a review of the official planning documents that such agencies have prepared.

A measure of the operational efficiency of a roadway vehicle Level of Service (LOS): traffic stream using procedures that consider factors such as vehicle delay, freedom to maneuver, traffic interruptions, comfort and convenience, and safety. Traffic analysts express LOS as letter grades, ranging from Level of Service A (free flowing) to Level of Service F (severely congested); they measure LOS by the average delay for all vehicles. Specifically, Level of Service A describes operations with very low delay (less than 5.0 seconds per vehicle); Level of Service B describes operations with delay in the range of 5.1 to 15.0 seconds per vehicle; Level of Service C describes operations with delay in the range of 15.1 to 25.0 seconds per vehicle; Level of Service D describes operations with delay in the range of 25.1 to 40.0 seconds per vehicle; Level of Service E describes operations with delay in the range of 40.1 to 60.0 seconds per vehicle; and Level of Service F describes operations with delay in excess of 60.0 seconds per vehicle.

low-income population:

maintenance area:

A population composed of persons whose median household income is below the Department of Health and Human Services poverty guidelines.

An area classified by EPA as meeting National Ambient Air Quality Standards (NAAQS) and which previously (within the last 10 years before reclassification) did not meet NAAQS. maintenance-of-way: The activity of maintaining the track and structures of a railroad.

For the purposes of this Final EIS, a rail line segment where the annual volume of hazardous material it carries is projected to double and also exceed 20,000 carloads as a result of the proposed Conrail Acquisition.

Mechanical Department: Department of the railroad primarily responsible for the maintenance and inspection of locomotives, freight cars, and other moving equipment.

Memorandum of Agreement (MOA):

major key route:

With regard to cultural resources for the Final EIS, a legally binding document executed under 36 CFR 800.5(e)(4) that either specifies the process a Federal agency will undertake in order to avoid, reduce, or mitigate adverse effects on historic properties by the implementation of a proposed action, or documents the acceptance of such effects in the public interest. The parties who sign a MOA generally include the lead agency, the State Historic Preservation Office, the Advisory Council on Historic Preservation, and sometimes other interested parties.

Memorandum of Understanding (MOU): An agreement that two or more parties execute that sets forth the specific duties and responsibilities of each party. For the purposes of this Final EIS, MOU is an agreement that the Applicants may negotiate with communities.

minority population:

mitigation:

A population composed of persons who are Black (non-Hispanic), Hispanic, Asian American, American Indian, or Alaskan Native.

An action taken to prevent, reduce, or eliminate adverse environmental effects.

#### Glossary of Terms

motive power:

(MRS):

Locomotives operated by the railroad.

multi-level rail car:

**Multiple Resource Score** 

A two- or three-level freight car, designed for transporting automotive vehicles.

For the Environmental Justice analysis, a measure of aggregate impacts used to identify the geographic areas of greatest concern. This score sums the environmental resource scores for hazardous materials transport, noise, and traffic safety and delay and forms the basis for the tests for disproportionality.

National Ambient Air Quality Standards (NAAQS):

National Environmental Policy Act (NEPA):

National Historic Preservation Act (NHPA): Air pollutant concentration limits established by the EPA for the protection of human health, structures, and the natural environment.

The National Environmental Policy Act of 1969, as amended (42 U.S.C. 4321-4347; P.L. 91-190) is the basic national charter for the protection of the environment. It establishes policy, sets goals, and provides means for carrying out the policy. Its purpose is to provide for the establishment of a Council on Environmental Quality and to instruct Federal agencies on what they must do to comply with the procedures and achieve the goals of NEPA.

The National Historic Preservation Act of 1966, as amended (16 U.S.C. 470-470t *et seq.*; P.L. 89-665), is the basic legislation of the Nation's historic preservation program that established the Advisory Council on Historic Preservation and the Section 106 review process. Section 106 of the NHPA requires every Federal agency to "take into account" the effects of its undertakings on historic properties.

National Priorities List (NPL):	A subset of CERCLIS; EPA's list of the most serious uncontrolled or abandoned hazardous waste sites identified for possible long-term remedial action under the Superfund Program.
National Register of Historic Places (NRHP):	Administered by the National Park Service, the Nation's master inventory of known historic properties, including buildings, structures, sites, objects, and districts that possess historic, architectural, engineering, archaeological, or cultural significance at the Federal, state, and local levels.
Native American:	According to the Native American Graves Protection and Repatriation Act of 1990, as amended (25 U.S.C. 3001 <i>et seq.</i> ; P.L. 101-601), of, or relating to, a tribe, people, or culture that is indigenous to 'Le United States.
Native American lands:	According to the regulations of the Advisory Council on Historic Preservation in 25 CFR 800.2, as modified by the scope of thic ' lands under the jurisdiction or control of an Indian eluding all lands within the exterior tondaries ( ) A Lerican Indian reservation.
Negotiated Agreement:	An agreement between CSX, NS, or both, and one or more communities or other governmental units that addresses potential environmental impacts or other issues.
<b>No-Action Alternative:</b>	The proposed acquisition of Conrail by CSX and NS does not take place under this alternative; also the present setting for the pre-Acquisition conditions

#### Glossary of Terms

A disturbance or annoyance of an intruding or unwanted sound. Noise impacts essentially depend on the amount and nature of the intruding sound, the amount of background sound already present before the intruding or unwanted sound occurred, and the nature of working or living activity of the people occupying the area where the sound occurs.

noise contour:

noise:

Lines plotted on maps or drawings connecting points of equal sound levels.

noise-sensitive receptor:

Location where noise can interrupt ongoing activities and can result in community annoyance, especially in residential areas. The Board's environmental regulation; include schools, libraries, hospitals, residences, retirement communities, and nursing homes as examples of noise-sensitive receptors.

nonattainment area:

An area that EPA has classified as not complying with the National Ambient Air Quality Standards promulgated under the Clean Air Act.

Northeast Corridor (NEC): Railroad right-of-way between Boston, Massachusetts and Washington, D.C. on which Amtrak and others operate; Amtrak is responsible for operation and maintenance on all of the route, except the route segment between New Haven, Connecticut and New Rochelle, New York. Northeast Operating Rules: Rules that govern railroad operations, adapted by members of the Northeast Operating Rules Advisory Committee (NORAC). These operating rules apply to all railroads when working on any NORAC member's territory. The NORAC members are Bay Colony Railroad, Conrail Inc. and Consolidated Rail Corporation (Conrail), Delaware & Hudson Railway company, Guildford Transportation Industries, National Railroad Passenger Corporation (Amtrak), New Jersey Transit (NJT), New York Susquehanna & Western Railway Corporation, Providence & Worcester Railroad Company, and Southeastern Pennsylvania Transportation Authority (SEPTA).

notices:

equipment:

Documents addressed to engineers and other operating employees detailing temporary or local operating rules and restrictions.

Track and other maintenance equipment provided with flanged wheels and able to move along railroad track.

operating employee:

on-track (maintenance)

Railroad employee engaged in the operation of trains, including a member of the train crew; a train dispatcher; and a track, a signal, and an equipment maintenance employee.

Operating Plans: Documents that CSX and NS provided as part of the Application, detailing their planned railroad operations following the proposed Conrail Acquisition.

operating practices: Safety and operating rules, practices, and procedures contained in operating rulebook, timetable, special instructions, or any other company-issued instructions and the management decisions implementing those rules and instructions that govern the movement of trains and work on or around active tracks. operating rules:

Written rules of a railroad governing the operation of trains and the conduct of employees responsible for train operations when working on or around active tracks.

**Operation Lifesaver:** 

A non-profit public information and safety education program dedicated to eliminating collisions, deaths, and injuries at highway/rail at-grade crossings and on railroad rights-of-way. It is composed of a broad-based coalition of Federal, state, and local government agencies, private safety groups, and transportation industry representatives.

particulate matter (PM):

Airborne dust or aerosols.

Party of Record (POR):

passive warning devices:

positive train separation:

Party that notified the Board of their active participation in the proceeding about the proposed Conrail Acquisition. When submitting a filing to the Board, the POR must also notify the entire POR service list.

Traffic control devices that do not give positive notice to highway users of the approach or presence of a train. These devices may include signs and pavement markings, located at, or in advance of, railroad crossings to indicate the presence of a crossing and the presence of a train. These signs are either regulatory or non-regulatory and may include parallel track signs, crossbucks, stop signs, yield signs, and constantly flashing lights.

Mechanism included in positive train control, an experimental, automated safety system, using Global Positioning System (GPS) technology, onboard computers and wayside information inputs to control train movement. In the event of failure on the primary safety system, positive train control reduces the risk of single-point failure (that is, human error). posted speed:

Maximum speed permitted at a specific location on the railroad network irrespective of train type.

Prevention of Significant Deterioration (PSD) Class I Areas:

**Primary Application:** 

National parks and wilderness areas designated under the Clean Air Act as areas for which users are to maintain air quality at pristine levels, with very small increases in air pollution levels allowed.

The formal filing of documents with the Surface Transportation Board by applicants for railroad mergers, acquisitions, constructions, or abandonments. The Primary Application contains Operating Plans and information describing related construction projects. It also includes an Environmental Report, describing the physical and operational changes associated with the proposed action and the potential environmental effects of that action.

prime farmland:

proposed Conrail Acquisition:

public uses:

queue:

According to Natural Resources Conservation Service, land having the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops.

The proposed acquisition of Conrail's physical assets and operating systems by CSX and NS, for which the Applicants are seeking approval from the Board.

According to 49 U.S.C. 10905 and STB Regulations "Surface Transportation Manual," Section 1105.7(3)iv, those identified alternative public purposes for the use of rail properties proposed for abandonment or discontinuance, including highways, other forms of mass transportation, conservation, energy production or transmission, or recreation.

A line of vehicles waiting at a highway/rail at-grade crossing for an obstruction to clear.

For the purposes of this Final EIS, portions of rail lines that

extend between two terminals or junction points. Line of railroad track between two points on a rail system. rail route: A railroad track that typically connects to the main line at only rail spur: one end and provides rail service to one or more railroad freight customers. A rail spur could also parallel the main line. A location or facility with multiple tracks where rail operators rail yard: switch and store rail cars. receptor: See noise-sensitive receptor. A group of railroad maintenance-of-way employees that work regional and system a particular region or an entire railroad system. gang: Actions taken to mitigate the adverse effects, or potential remediation (remedial adverse effects, to the environmental or to the public health and actions): welfare resulting from the release or spill of hazardous substances. A document filed with the Board by a party to this proceeding **Request for Conditions:** on or before October 21, 1997, that requests the Board to impose one or more specified requirements on the Applicants as a condition to the Board's approval of the proposed Conrail Acquisition. The Resource Conservation and Recovery Act of 1976 (42 **Resource Conservation** U.S.C. 6901 et seq.; P.L. 94-580) is a Federal act governing the and Recovery Act (RCRA): generating, storing, transporting, treating, and disposing of hazardous waste.

rail line segment:

Federal database containing information on facilities that **Resource Conservation** generate, transport, store, treat, and/or dispose of hazardous and Recovery **Information System** waste. (RCRIS): A report, submitted by an Inconsistent and Responsive Responsive applicant, that contains detailed environmental information **Environmental Report** regarding the activities proposed in its IR Application and (RER): complies with the requirements for environmental reports in the Board's rules at 49 CFR 1105.7(e). A speed that will permit a train to stop within one-half the restricted speed: range of vision of the railroad employee controlling the movement of the train; the train must stop before passing improperly aligned switches, a defect in the track structure, deliberately placed objects, or striking other railroad equipment. According to Federal Railroad Administration regulations, this speed is not to exceed 20 miles per hour. In railroad yards, a braking device, usually power-operated, retarder: built into a railroad track to reduce the speed of cars by means of brake-shoes which, when set in braking position, press against the sides of the lower portions of the wheels. The strip of land for which an entity (for example, a railroad) right-of-way: has a property right to build, operate, and maintain a linear structure (for example, a rail line). Railroad supervisor responsible for track inspection and roadmaster: maintenance over a specified portion of the railroad network. Federal Railroad Administration program to audit railroad Safety Assurance and safety practices and to ensure compliance with Federal **Compliance** Program regulations. (SACP):

The manner in which management and employees in an safety culture: organization view and approach the issue of safety, including both formalized rules and informal practices in the organization. A series of acquisition-related guidelines that the Federal Safety Implementation Railroad Administration developed for CSX and NS, detailing Plan Guidelines (SIPG): a list of safety concerns that CSX and NS must address in their Safety Integration Plans. Plans that the Applicants prepared and submitted to the Board **Safety Integration Plans:** to explain how they propose to provide for the safe integration of their separate corporate cultures and operating systems, if the Board approves the proposed Conrail Acquisition. The review process set forth in Section 106 of the NHPA (16 Section 106 review U.S.C. 470) that requires every Federal agency to "take into process: account" the effects of its undertakings on historic properties and affords the ACHP the opportunity to comment on those

seniority district:

seniority rights:

specific labor unior. (for example, engineers, dispatchers) are authorized and expected to work.

A geographic area within which a group of employees in a

The priority one employee has over another employee in bidding for available positions, choice of work assignments, and similar matters, based on length of employment in a specified category. Agreements between railroad companies and labor unions specify such rights.

sensitive receptor:

See noise-sensitive receptor.

undertakings and their effects.
separated grade crossing:	The site where a local street or highway crosses railroad tracks at a different level or elevation, either as an overpass or as an underpass.
service:	The official notification and delivery of Board decisions and notices (including EAs and EISs) by the Secretary of the Board to persons involved in a particular proceeding.
Settlement Agreement:	An agreement negotiated between CSX or NS or both and one or more parties, including other railroads, that addresses concerns or requests of the party (or parties). Generally, such an agreement addresses competitive customer service or labor issues.
Seven Separate Connections:	Seven new rail line connection construction projects in Illinois, Indiana, and Ohio. These projects total approximately 4 miles of new track. CSX and NS requested that the Board give early consideration and approval to the physical construction of these particular connections.
Shared Assets Areas:	Areas comprising Conrail facilities in southeastern Michigan, northern New Jersey, and southern New Jersey/Philadelphia that CSX and NS would share and Conrail Shared Assets Operations would operate for the benefit of both CSX and NS, if the Board approves the proposed Conrail Acquisition.
shifted load:	An improperly secured freight car load that has moved and may protrude beyond the allowed dimensional limits.
shipment:	A unit of freight given to the railroad for movement to its destination by an individual customer.

A track parallel to a main track that is connected to the main track at ach end. A siding is used for the passing and/or storage of trains.

signal maintainer:

siding:

Railroad employee who maintains signal and communications systems.

socioeconomic: For this Final EIS, job loss directly attributable to changes in the physical environment as a result of construction and abandonment activities and other activities related to the proposed Conrail Acquisition project.

Sound Exposure Level (SEL):

For a transient noise event such as a passing train, equivalent to the maximum A-weighted sound level that would occur if all of the noise energy associated with the event were restricted to a time period of 1 second. The SEL accounts for both the magnitude and the duration of the noise event; noise analysts use SEL to calculate the day-night average noise level.

Spill Prevention, Control, and Countermeasures Plan (SPCCP): A site-specific document written to detail measures to prevent discharges of oil into waters of the United States (as defined in the Clean Water Act). Facilities with aboveground storage capacities in a single container greater than 660 gallons, or the aggregate aboveground storage capacity greater than 1,320 gallons, or total underground storage capacity greater than 42,000 gallons are required to prepare SPCCPs.

superior train:

For purposes of this Final EIS, a passenger train operating on the same track network with freight trains. Superior trains must nave track clear of all trains not less than 15 minutes prior to their arrival. See *temporal train separation*. collisions. See superior train.

Supplemental Environmental Report: A report that analyzes the environmental impacts of operating changes related to a Settlement Agreement between an Applicant and another railroad that exceed the Board's thresholds when added to changes proposed in the Applicants' Operating Plans.

switch:

The portion of the track structure used to direct cars and locomotives from one track to another.

switching:

The activity of moving cars from one track to another in a yard or where tracks go into a railroad customer's facility.

The time separation of passenger trains that share rail lines

with freight trains, in order to reduce the possibility of train

temporal train separation:

territory:

The portion of a railroad's track network under the management of a particular supervisor.

A species that is likely to become endangered within the

threatened species:

foreseeable future throughout all or part of its range. Federal and state laws protect these species.

threshold for environmental analysis: A level of proposed change in railroad activities that determines the need for SEA's environmental review. For the proposed Conrail Acquisition, SEA used the Board's environmental rules at 49 CFR Part 1105 to determine the activities that it would examine for air and noise impacts ("Board thresholds"). For other issue areas, SEA developed appropriate thresholds to guide its environmental review ("SEA thresholds"). The term "Board thresholds", as used in this EIS, may refer to either Board or SEA thresholds. timetable:

A document that identifies key railroad line features over a defined portion of the network. The features usually include distances, speed limits, track layout, type of signaling, location and length of passing sidings, and the local applicability of specific operating rules. Operating rules are often published with the timetable.

track geometry:

Dimensional description of railroad track and individual rails compared to optimal design criteria.

track geometry inspection car:

Rail vehicle equipped with instruments to make continuous, inmotion measurements of variations in the track gauge, alignment, and cross level.

The right (or combination of rights) of one railroad to operate

over the designated trackage of another railroad including, in some cases, the right to operate trains over the designated trackage; the right to interchange with all carriers at all junctions, the right to build connections or additional tracks to access other shipper or carriers. See also *haulage right(s)*.

trackage right(s):

trackage rights agreement:

traffic volume (highway):

The number of highway vehicles that pass over a given point during a given period of time, often expressed on an annual, daily, hourly, and sub-hourly basis. For the purposes of this

Final EIS, SEA expressed highway traffic volumes on a daily

An agreement between two parties that defines the trackage

rights granted to one party over the tracks of a second party.

traffic volume (rail):

The total volume of rail traffic that passes over a given rail line segment, typically expressed in either trains per day or annual million gross tons per year.

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basis.

A conveyance transported by one or more locomotives train (freight): typically with 40 to 150 freight cars, measuring approximately 5,000 to 8,000 feet in length. For the purposes of this Final EIS, does not apply to locals, work trains, switch-engine movements, or engine-only movements. Equipment composed of one or more rail cars designed to carry train (passenger): passengers, propelled by a locomotive or self-propelled, moving from one place to another. Employees assigned to operate a train, usually an engineer, a train crew: conductor, and one or more trainmen. An electronic device located alongside a rail track that train defect detector: mor...ors passing trains to determine the presence of certain potentially dangerous conditions, such as an overheated wheel bearing ("hot box") or a shifted load that protrudes from the rail car. Member of a train crew responsible for assisting the engineer trainman: and conductor in operating the train, especially with switching cars. Railroad operations supervisor responsible for managing train trainmaster: and yard operations and operating employees on a defined portion of the railroad network. An intermittent occurrence of noise, such as the passing of a transient noise event: train that generates such noise. Department of the railroad responsible for day-to-day train Transportation operations and dispatching. Department:



Triple Crown Service An expedited intermodal service offered by both Conrail and (TCS): An expedited intermodal service offered by both Conrail and NS. TCS trains do not require the use of flat cars, but rather use specially designed dual-mode highway trailers that are coupled together with two-axle rail wheel sets that support the ends of the trailers for the rail portion of the rail-highway movement. The equipment used is similar to "RoadRailer" equipment.

to vibration.

turnout:

The portion of railroad track structure where a single track divides into two tracks.

Verified Statement:

A party's sworn statement that provides information to the Board.

The rate of change of displacement of a vibration. Noise

analysts often express measurements of vibration in terms of velocity because velocity correlates well with human response

vibration velocity:

waybill:

Document or computer record containing details of a rail shipment: origin, destination, route, commodity, freight rate, car or cars used, and similar information.

Adjacent to the railroad track, as in "wayside signals" or "wayside defect detectors."

Train noise adjacent to the right-of-way that comes from sources other than the horn, such as engine noise, exhaust noise, and noise from steel train wheels rolling on steel rails.

wayside:

wayside noise:

wetlands:

According to 40 CFR Part 230.41, those "areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions," generally including swamps, marshes, bogs, and similar areas.

yardmaster:

Railroad operations supervisor responsible for railroad operations and employees in a railyard.

Proposed Conrail Acquisition

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## LIST OF ACRONYMS AND ABBREVIATIONS

AAR	Association of American Railroads
ABS	Automatic Block System
ACHP	Advisory Council on Historic Preservation
ACS	Automatic Cab Signals
ACSES	Advanced Civil Speed Enforcement System
ADT	Average Daily Traffic
Amtrak	The National Railroad Passenger Corporation
ANSI	American National Standards Institute
AoPE	Area of Potential Effect(s)
APL	American Presidents Line
APTA	American Public Transit Association
ARU	Allied Rail Unions
ASTM	American Society for Testing and Materials
ATC	Automatic Train Control
B&O	Baltimore & Ohio Railroad Company
<b>B&amp;OCT</b>	Baltimore & Ohio Chicago Terminal Railroad Company
BIA	Bureau of Indian Affairs
BMP	Best Management Practice
Board	Surface Transportation Board
BOCT	Baltimore & Ohio Chicago Terminal Railroad Company
BRL	The Cities of Bay Village, Rocky River, and Lakewood, Ohio
CAA	Clean Air Act of 1970
CAAA	Clean Air Act Amendments of 1990
CEQ	Council on Environmental Quality
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act of 1980
CERCLIS	Comprehensive Environmental Response, Compensation, and Liability Information System
CFR	Code of Federal Regulations
со	carbon monoxide
Conrail	Conrail, Inc. and Consolidated Rail Corporation
CP	Control Point
CPR	Canadian Pacific Railway
CRC	Comments and Requests for Conditions
CSX	CSX Corporation and CSX Transportation, Inc.

CTC	Centralized Traffic Control
CZM	Coastal Zone Management
CZMA	Coastal Zone Management Act of 1972
dB	decibel
dBA	A-weighted decibels
DES	Division of Endangered Species
DOI	U.S. Department of the Interior
DOT	U.S. Department of Transportation
EA	Environmental Assessment
EDR	Environmental Data Resources, Inc.
EIS	Environmental Impact Statement
EJ	Environmental Justice
EO	Executive Order
EPA	U.S. Environmental Protection Agency
ERS	Environmental Resource Score
ESA	Endangered Species Act of 1973
FAA	Federal Aviation Administration
FEMA	Federal Emergency Management Agency
FHWA	Federal Highway Administration
FIRM	Flood Insurance Rate Map
FMEA	Failure Mode and Effects Analysis
FRA	Federal Railroad Administration
FRA ID	Federal Railroad Administration Identification Number
FTA	Federal Transit Administration
GIS	Geographic Information System
GPS	Global Positioning System
HABS	Historic American Buildings Survey
HAER	Historic American Engineering Record
HCM	The Transportation Research Board's Highway Capacity Manual
HMERP	Hazardous Materials Emergency Response Plan
HMIS	Hazardous Materials Information System
HUD	Department of Housing and Urban Development
ICC	Interstate Commerce Commission
ID	Identification
IHB	Indiana Harbor Belt Railroad Company
IR	Inconsistent and Responsive [application]
ISTEA	Intermodal Surface Transportation Efficiency Act
IT	Information Technology
LAL	Livonia, Avon, and Lakeville Railroad Corporation
Lda	day-night equivalent sound level
L <sub>eq(b)</sub>	hourly energy-averaged sound level
LOS	Level of Service
LUST	Leaking Underground Storage Tank

MARC	Maryland Rail Commuter (Maryland's Mass Transit Administration's Commuter Rail Service)
MBTA	Massachusetts Bay Transportation Authority
Metra	Northeast Illinois Regional Commuter Railroad Corporation
min./veh	minutes per vehicle
MNR	Metro-North Railroad (Metro-North Commuter Railroad Company)
MOA	Memorandum of Agreement
MOU	Memorandum of Understanding
mph	miles per hour
MRS	Multiple Resource Score
MRTA	Metro Regional Transit Authority of Akron, Ohio
MUTC	Manual of Uniform Traffic Control Devices
N/A	Not Applicable
NAAOS	National Ambient Air Quality Standards
NEC	Northeast Corridor
NEPA	National Environmental Policy Act of 1969
NFIP	National Flood Insurance Program
NHPA	National Historic Preservation Act of 1966
NHTSA	National Highway Traffic Safety Administration
NJT	New Jersey Transit
NORAC	Northeast Operating Rules Advisory Committee
NO <sub>x</sub>	nitrogen oxide
NPDES	National Pollutant Discharge Elimination System
NPL	National Priorities List
NPS	National Park Service
NRC	Nuclear Regulatory Commission
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
NS	Norfolk Southern Railway Company and Norfolk Southern Corporation
NWI	National Wetlands Inventory
NYCH	New York Cross Harbor
0,	ozone
OAR	Office of Air and Radiation (within Environmental Protection Agency)
OHPO	Ohio Historic Preservation Office
OMS	Office of Mobile Sources (within Environmental Protection Agency)
OTR	Ozone Transport Region
PCB	polychlorinated biphenyl
PDEA	Preliminary Draft Environmental Assessment
PIH	Poison Inhalation Hazard
P.L.	Public Law
PM	particulate matter
PM <sub>10</sub>	particulate matter less than 10 microns in diameter
POR	Party of Record

PSD	Prevention of Significant Deterioration
P&W	Providence & Worcester
QA/QC	Quality Assurance/Quality Control
RCRA	Resource Conservation and Recovery Act of 1976
RCRIS	Resource Conservation and Recovery Information System
RER	Responsive Environmental Report
RQ	Reportable Quantity
SACP	Safety Assurance and Compliance Program
SARA	Superfund Amendments and Reauthorization Act of 1986
SCS	Soil Conservation Service
SEA	Section of Environmental Analysis
sec/veh	seconds per vehicle
SEL	Sound Exposure Level
SEPTA	Southeastern Pennsylvania Transportation Authority
SHPO	State Historic Preservation Office
SIPG	Safety Implementation Plan Guidelines
SPCCP	Spill Prevention, Control, and Countermeasures Plan
Stat.	Statute
STB	Surface Transportation Board
SO <sub>2</sub>	sulfur dioxide
TCS	Triple Crown Service
TLCPA	Toledo-Lucas County Port Authority
TMACOG	Toledo Metropolitan Area Council of Governments
Tri-Rail	Florida Tri-County Commuter Rail Authority
USACE	U.S. Army Corps of Engineers
U.S.C.	United States Code
USCG	U.S. Coast Guard
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
VRE	Virginia Railway Express
WMATA	Washington Metropolitan Area Transit Authority

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# FINAL ENVIRONMENTAL MPACT STATEMENT

Finance Docket No. 33388

### "PROPOSED CONRAIL ACQUISITION"

CSX Corporation and CSX Transportation, Inc. Norfolk Southern Corporation and Norfolk Southern Railway Company

Control and Operating Leases/Agreements Conrail, Inc. and Consolidated Rail Corporation



### **VOLUME 5**

Chapter 7: Recommended Environmental Conditions

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### **GUIDE TO VOLUME 5**

Volume 5 of the Proposed Conrail Acquisition Final EIS contains the following items:

- Contents of Chapter 7.
- Chapter 7, "Recommended Environmental Conditions."
- Guide to the Final EIS.
- Glossary of Terms.
- List of Acronyms and Abbreviations.
- Contents of the Final EIS.

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#### CHAPTER 7 RECOMMENDED ENVIRONMENTAL CONDITIONS

#### 7.1 OVERVIEW

In conducting its environmental review, the Section of Environmental Analysis (SEA) of the Surface Transportation Board (the Board) identified both potential beneficial and adverse environmental impacts associated with the proposed Conrail Acquisition. These impacts are discussed in detail in Chapter 4, "Summary of Environmental Review." This chapter describes the final mitigation measures SEA recommends that the Board impose as environmental conditions if it approves the proposed Conrail Acquisition. These mitigation measures address the potential adverse environmental impacts that SEA determined could be significant.

SEA developed these recommendations after completing a thorough, independent analysis of the potential environmental effects. This environmental analysis included:

- Careful and thorough review of all public comments.
- Consultations with Federal, regional, state, and local agencies.
- Full consideration of environmental and railroad operating information.
- Extensive site visits.
- Comprehensive public outreach that included environmental justice communities.

As discussed in more detail in the following sections, SEA faced a number of challenges in conducting the environmental review process and developing environmental mitigation measures for the proposed Conrail Acquisition. After extensive and careful analysis, SEA developed comprehensive, reasonable, and practical environmental mitigation recommendations that would address potential significant adverse environmental impacts. This mitigation falls within the scope of the Board's jurisdiction and is consistent with the Board's practice of mitigating only those environmental impacts that directly result from the proposal. However, SEA acknowledges that, even with the recommended mitigation, the potential for significant environmental impacts still exists in certain communities. This overview describes some of these impact areas and the environmental issues these communities would face if the Board were to approve the proposed Conrail Acquisition.

In SEA's environmental review of the proposed Conrail Acquisition, which is one of the largest and most complex transactions ever considered by the Board, SEA completed a comprehensive analysis of a broad range of environmental issues. SEA considered these issues on a systemwide, regional, and local level. This approach allowed SEA to identify and assess potential environmental impacts and develop meaningful environmental mitigation on a general, regional, and local level that would address potential significant adverse effects.

SEA's general mitigation recommendations have broad applicability. For example, SEA's general mitigation would require the Applicants to adopt various strategies to address safety along more than 40 rail line segments to protect the numerous counties and communities that would be potentially affected.

SEA's regional mitigation recommendations address issues that affect rail corridors that cross state lines or multiple states. All of SEA's regional mitigation is safety related, such as hazardous mater als transport or passenger rail safety. In all, SEA's regional mitigation would address safety issues on 63 rail line segments in 15 states and the District of Columbia. All of the counties and communities along these segments would benefit from this recommended mitigation.

SEA's local mitigation is site-specific and addresses issues such as traffic delay, highway/rail at-grade crossing safety, noise, eme:gency response vehicle delay, and protection of natural and cultural resources. Numerous communities in eight states would benefit from SEA's recommended local mitigation.

Throughout its environmental review process, SEA sought public input. SEA received a broad range of public commental review process, SEA sought public input. SEA received a broad organizations, businesses, and individuals. In developing reasonable mitigation to address those environmental impacts that would directly result from the proposed Conrail Acquisition, SEA had to balance the various perspectives and concerns the public raised with the limits of the Board's jurisdiction and the range of environmental impacts and issues.

During the environmental review process, SEA encouraged the Applicants to consult with potentially affected communities and develop Negotiated Agreements. These Negotiated Agreements can be more far-reaching in addressing environmental issues than the environmental mitigation conditions that the Board may thilaterally impose. As of May 15, 1998, the Applicants executed 18 Negotiated Agreements with communities and organizations. SEA has reviewed these Negotiated Agreements and recommends that the Board impose a condition requiring the Applicants to comply with them. To the extent that a Negotiated Agreement is inconsistent or incompatible with a SEA recommended condition, SEA recommends that the Board substitute these agreements for the local mitigation that otherwise would be imposed.

In developing its final recommended environmental mitigation measures, SEA considered a host of challenging issues that included:

- The broad geographic scope of the proposed Conrail Acquisition.
- The number of concerned communities.
- The variety of environmental issues.
- . The importance of safety.
- The importance of safety integration planning.
- The accommodation of freight rail and passenger rail service on the same rail line.
- The concerns about environmental justice.
- The scope of the Board's jurisdiction to impose mitigation.

These are discussed in detail in the Sections 7.1.1 to 7.1.8. SEA's conclusions are discussed in Section 7.1.9, "SEA's Conclusions," and SEA's recommended environmental conditions are set forth in Section 7.2, "Final Recommended Environmental Conditions."

#### 7.1.1 Broad Geographic Scope of the Proposed Conrail Acquisition

The proposed Conrail Acquisition would affect most of the eastern United States, including 24 states and the District of Columbia. SEA's comprehensive analysis considered potential environmental effects on thousands of communities where more than 1,000 rail line segments, comprising 44,000 miles of track, would traverse the affected states and the District of Columbia. SEA's environmental review identified and evaluated the potential environmental effects of the proposed Conrail Acquisition on a system-wide, regional, and local basis.

In developing appropriate mitigation, SEA conducted hundreds of site visits. SEA also consulted with numerous federal, state, and local agencies throughout the potentially affected states and the District of Columbia. Furthermore, SEA considered mitigation strategies suggested by commentors and voluntary mitigation agreed to by the Applicants. SEA developed a broad range of mitigation measures designed to address a variety of potential significant adverse effects in 19 states and the District of Columbia on general, regional, and local levels. For example, in its general safety mitigation, SEA recommends that the Board require the Applicants to post signs at all public highway/rail at-grade crossings on 44 rail line segments to warn motorists of impending increases in rail traffic and to provide a toll-free phone number to report malfunctioning crossing devices.

#### 7.1.2 Number of Concerned Communities

In its review of the proposed Conrail Acquisition, SEA considered the effects of increased rail activities in some of the most densely populated areas of the eastern and upper midwestern United States. These areas included numerous communities that raised a variety of environmental concerns. While some communities would experience decreases in rail activity, a number of communities would experience substantial increases in train traffic or other changes in rail activity such as rail line abandonment or construction projects.

Potentially affected communities for which SEA recommends mitigation generally fall into two categories. In one category, the Acquisition-related increases in rail activity (e.g., train traffic) would cause potential significant adverse environmental effects that would exceed SEA's criteria of significance and warrant mitigation. In the other category, the Acquisition-related increases in rail activity (e.g., train traffic) in combination with the unique characteristics of that community would cause potential significant environmental impacts that SEA believes would warrant mitigation.

In developing its environmental analysis and mitigation for both categories of communities, SEA carefully considered all of the comments that the communities and others provided to SEA throughout the environmental review process. SEA's recommended environmental mitigation measures include conditions that would directly benefit the numerous communities where increases in train traffic and other rail activities related to the proposed Conrail Acquisition could cause significant adverse environmental impacts. In addition, throughout its environmental review process, SEA encouraged the Applicants to meet with potentially affected communities to discuss local environmental impacts and community concerns and to negotiate agreements with the communities that would address their local environmental concerns.

#### 7.1.3 Variety of Environmental Issues

Given the broad geographic area and number of potentially affected communities, SEA analyzed and evaluated a broad spectrum of environmental issues. The proposed Conrail Acquisition involves a number of rail activities that would have the potential for a wide range of environmental impacts, both beneficial and adverse. These activities include the following:

- Increases or decreases in rail traffic on rail lines.
- Changes in activity level at rail yards and intermodal facilities.
- Rail line abandonment and construction projects.

The various potential environmental impacts that could result from these proposed activities include safety (e.g., hazardous materials transport, highway/rail at-grade crossings, passenger rail, and freight rail), transportation systems (e.g., highway/rail at-grade crossing delay, emergency vehicle response delay, and other traffic issues), air quality, noise, cultural resources, natural resources, land use, Native American issues, and environmental justice populations. Accordingly, SEA's recommended mitigation is designed to address potential significant adverse impacts of the proposed Conrail Acquisition in these areas. For example, SEA recommends that the Board require the Applicants to construct noise barriers or install sound insulation in those areas SEA determined would be most seriously affected by Acquisition-related increases in noise.

#### 7.1.4 Importance of Safety

The Applicants' proposed increases in rail activity have the potential to affect safety in many ways, including train operations, hazardous materials transport, and motor vehicles at highway/rail at-grade crossings. Therefore, rail safety has been a paramount concern in this case. The majority of SEA's recommended environmental conditions address safety concerns related to the proposed railroad operations. For example, SEA recommends that the Board require the Applicants to upgrade warning devices at 89 highway/rail at-grade crossings to reduce the risk of vehicle-train accidents. For the transport of hazardous materials, SEA recommends that the Board require the Applicants to develop and provide an individual Hazardous Materials Emergency Response Plan for each affected community's local emergency response organization or coordinating body along certain rail line segments over which hazardous materials would be transported. For certain segments, SEA is also recommending rail car defect detectors to allow early detection of potentially unsafe conditions that could contribute to a rail accident. SEA believes that its recommended mitigation satisfies the safety concerns that have been raised in this proceeding.

#### 7.1.5 Importance of Safety Integration Planning

Prior to the Draft EIS, the Federal Railroad Administration (FRA), the agency within the U.S. Department of Transportation responsible for enforcement of railroad safety regulation, commented to the Board that combining the three rail systems into two systems, with some areas operated as Shared Assets Areas, could cause safety problems and recommended that the Board require the Applicants to develop plans detailing the procedures each would follow to integrate the railroads' systems in a manner that will maintain safety. The Board agreed with these concerns and, for the first time in its history required the Applicants (see Decision No. 52, served on November 3, 1997) to prepare Safety Integration Plans explaining the process by which they intend to integrate Conrail into their operations.

Working closely with FRA, the Applicants prepared Safety Integration Plans and submitted them to the Board on December 3, 1997. SEA circulated the Safety Integration Plans with the Draft EIS to allow for public review and comment. SEA also carefully reviewed the Safety Integration Plans. DOT's comments on the Draft EIS state that FRA is satisfied that the plans address and satisfactorily mitigate every safety concern raised in the environmental review portion of this proceeding, that no other mitigation on this subject is necessary or appropriate, and that FRA will continue to work with the Applicants to address safety integration issues that arise.

Prior to issuing this Final EIS, the Board and FRA, with the concurrence of the U.S. Department of Transportation, entered into a Memorandum of Understanding (MOU) to clarify the actions each will take to assure the successful implementation of the Safety Integration Plans. Under the terms of that Memorandum, both FRA and the Board recognize that safety integration is an ongoing process that involves both agencies. The agencies agreed that FRA would monitor, evaluate and review the Applicants' efforts with respect to implementation of the Safety Integration Plans. In addition, FRA would keep the Board informed of the Applicants' progress and any potential safety problems, providing recommendations for correcting the deficiency. The Board would exercise its oversight authority over the Applicants to correct any problems, if necessary. FRA's reporting would continue until FRA affirms to the Board in writing that the proposed integration is completed satisfactorily.

SEA is recommending that the Board require the Applicants to comply with their Safety Integration Plans and cooperate in the ongoing monitoring process. SEA believes this innovative and cooperative approach with FRA will allow Conrail, NS, and CSX to integrate their systems in a manner that is responsive to the requirements of public safety if the Board approves the proposed Conrail Acquisition. For more information on safety integration planning, see Chapter 6, "Safety Integration Planning."

#### 7.1.6 Accommodation of Freight Rail and Passenger Rail Service on the Same Rail Line

Under the proposed Conrail Acquisition, the Applicants' freight rail operations would share track with passenger rail systems on certain rail line segments. SEA conducted a full analysis of both safety and service issues for passenger and freight rail systems and operations. In its analysis, SEA determined that the proposed Conrail Acquisition would not result in any significant impacts to service or capacity but could create increases in accident risk on several line segments. SEA's set of recommended environmental conditions contains measures to ensure that the Applicants conduct their daily operations in a safe manner. For example, SEA recommends that the Applicants be required to consult with FRA and the affected passenger service agencies to develop operational strategies and to apply technology improvements for each of the potentially affected rail line segments to ensure the safety of passenger trains is maintained at or above current levels.

#### 7.1.7 Concerns About Environmental Justice

SEA faced numerous challenges in analyzing the environmental justice implications of the proposed Conrail Acquisition. These challenges include the broad geographic scope of the project, the wide variety of changes in railroad activities throughout the eastern United States (increases and decreases), and the broad range of potential environmental impacts in affected communities. In addition, SEA's options for mitigating potential environmental impacts on environmental justice populations were limited by the nature of the proposed transaction SEA reviewed. That is because SEA's environmental review primarily considered proposed changes in activities over existing rail lines, rather than siting or construction of new rail lines or facilities.

Once SEA identified potentially affected environmental justice populations and potential high and adverse environmental impacts, SEA conducted extensive public outreach efforts to inform and involve the identified communities in the environmental review process. SEA developed a demographic and statistical approach for evaluating if those potential impacts would be disproportionately borne by the identified environmental justice populations. If SEA determined that environmental impacts would be disproportionately high and adverse for minority and lowincome populations, SEA evaluated its recommended mitigation to determine if it was sufficient and appropriate to address potential environmental impacts for these populations.

As a result of its environmental justice analysis and outreach, SEA determined that, for the rail line segments that exceed SEA's thresholds for environmental analysis, the proposed Conrail Acquisition could result in disproportionatelyhigh and adverse impacts on environmental justice populations for hazardous materials transport safety. However, on a local or regional basis, SEA identified several areas in four states where there could be disproportionately high and adverse impacts for minority and low-income populations affected by the proposed Conrail Acquisition, in the absence of mitigation. SEA considered mitigation in the following areas, which include environmental justice populations:

- Illinois (Danville).
- Indiana (Attica and Lafayette).
- Ohio (Berea, Cleveland, Cleveland Heights, East Cleveland, Defiance, Euclid, Fostoria, Holgate, Mentor, New London, Tiffin, and Willard).
- Pennsylvania (Erie).

The Applicants have negotiated agreements with three of these communities regarding potential environmental impacts (Danville, East Cleveland, and Erie) to address their specific concerns. For the remaining communities, SEA first considered the effect of the mitigation it generally recommended for all communities that would experience a similar impact. If, because of the characteristics of the environmental justice population, SEA's mitigation would not be sufficient to address the potential environmental impacts, SEA developed tailored mitigation. To develop this tailored mitigation, SEA used information from its environmental evaluation, statistical analysis, and numerous site visits. SEA also conducted extensive outreach and carefully considered the public comments. For example, SEA modified the hazardous materials transport safety mitigation to meet the particular needs of the identified minority and low-income populations. SEA recommends that the Board require the Applicants to tailor the hazardous materials emergency response plans that will be required to ensure that they reflect the unique needs of environmental justice populations (e.g., slower emergency response or fewer evacuation alternatives).

#### 7.1.8 The Scope of the Board's Jurisdiction to Impose Mitigation

The Board has broad authority to impose conditions in railroad merger cases. However, the Board's authority to impose conditions is not limitless. To withstand judicial review, the record must support the imposition of the condition at issue. Moreover, there must be a sufficient nexus between the condition imposed and the transaction before the agency, and the condition must be reasonable. The Board does not have authority to impose mitigation to remedy pre-existing

conditions in a particular community better that are not a direct result of the transaction before it.

SEA encouraged the Applicants to consult with the potentially affected communities and develop agreements that would address environmental concerns related to railroad operations. These consultations resulted in a number of Negotiated Agreements that CSX or NS executed with local governments and organizations. These Negotiated Agreements often contain mitigation that is more far-reaching than environmental conditions the Board could impose.

To ensure implementation of these Negotiated Agreements, SEA recommends that the Board impose a requirements that the Applicants comply with these Negotiated Agreements as environmental mitigation conditions. In addition to these formal agreements, the Applicants have volunteered to undertake a number of mitigation measures to address environmental community concerns. These mitigation measures are presented in Section 7.2, "Final Recommended Environmental Conditions." Sometimes this voluntary mitigation also goes beyond the types of mitigation that the Board unilaterally could impose. For example, the Applicants have agreed, for certain communities, to fund participation in a training session at the national training center in Pueblo, Colorado, for representatives of those communities' emergency response providers.

#### 7.1.9 SEA's Conclusions

SEA has completed an extensive review of the potential environmental impacts that could result from the proposed Acquisition of Conrail by CSX and Norfolk Southern. Based on its independent environmental analysis and review of all the public comments, SEA has reached the following conclusions:

- 1. On a system-wide basis, SEA identified several environmental benefits resulting from overall improvements in operating efficiency. These benefits include reduced air pollutant emissions, reduced energy consumption, reduced likelihood of accidents involving hazardous materials, and reduced truck traffic on the interstate highway system, with a resulting decrease in highway accidents. However, to ensure a high level of safety along rail line segments where the train traffic increases would be 8 or more trains per day, SEA recommends several general safety mitigation measures, including measures to ensure that the public is effectively notified along rail line segments where those increases in train traffic would occur.
- 2. On a regional and local basis, SEA identified environmental benefits resulting from reduced train traffic along certain rail line segments and reduced activity at rail yards and intermodal facilities. Of the 1,022 rail line segments SEA evaluated, 201 would experience reduced train traffic and 532 rail line segments would experience no change in train traffic.

- SEA identified potential significant adverse environmental impacts for hazardous materials transport and passenger rail safety in certain regions or rail corridors. SEA identified reasonable and appropriate mitigation measures to address these potential environmental impacts.
- 4. SEA identified potential significant adverse environmental impacts in certain communities that would experience increased rail activities. These activities include increased traffic along rail line segments, at rail yards, or at intermodal facilities as well as rail line abandonment and construction projects. SEA identified these potential environmental impacts in the areas of freight rail safety, highway/rail at-grade crossing safety, highway/rail at-grade crossing delay (including emergency response vehicle delay), noise, natural resources, cultural resources, and hazardous waste sites. In mr ny cases, the Applicants negotiated agreements with the affected communities to address these environmental impacts and other local concerns. Where agreements were not reached, SEA identified reasonable and appropriate environmental mitigation to address each of these issue areas in the affected communities.
- 5. With regard to environmental justice, SEA conducted an extensive and thorough demographic analysis to identify areas where the potential environmental impacts of the proposed Conrail Acquisition could be disproportionately high and adverse for minority and low-income populations. SEA concluded that, on a local or regional basis, in several cities in four states, the potential environmental impacts could be disproportionately high and adverse for these environmental justice populations. In these cases, SEA reviewed and refined the recommended mitigation to ensure that it would address the particular environmental impacts and unique needs of these populations.
- 6. SEA's recommended mitigation measures are reasonable and feasible ways to address most potential significant adverse environmental impacts associated with the proposed Conrail Acquisition. However, for a limited number of locations with identified adverse environmental impacts, SEA determined that mitigation alternatives were not reasonable or feasible. For example, several communities could experience potential noise impacts above the Board's threshold for environmental analysis (65 dBA L<sub>dn</sub> or an increase of 3 dBA L<sub>dn</sub>) but less than SEA's criteria for noise mitigation (70 dBA L<sub>dn</sub> and an increase of 5 dBA L<sub>dn</sub>). Also, in some cases, commentors suggested mitigation to address pre-existing conditions. SEA did not recommend mitigation to address these pre-existing conditions because they were not attributable to the proposed Conrail Acquisition. Moreover, SEA did not recommend mitigating the potential environmental effects of increased train traffic by shifting traffic to other lines where doing so simply would have resulted in transferring the adverse impacts to other communities.
- 7. Based on its independent environmental analysis and consideration of reasonable and feasible mitigation strategies, SEA believes there is still the potential for significant adverse environmental impacts, as follows:

- Potential noise impacts from train horns, for which SEA does not recommend mitigation because of overriding safety concerns.
- Potential noise impacts resulting from the volume of post-Acquisitionrail traffic for certain noise receptors closer than 120 feet from the tracks, even with implementation of SEA's recommended noise mitigation. With SEA's recommended mitigation, there would be a smaller number of noise receptors (fewer than 60) on 8 rail line segments in Ohio, Pennsylvania, and Virginia (C-061, C-065, C-072, C-073, C-074, C-085, N-079, and N-100) that could experience substantial noise impacts.
- Potential emergency vehicle response delay in several small communities where SEA's emergency response mitigation strategies would not be practical or reasonable.

Based on its independent environmental analysis and review of all the public comments, SEA recommends that the Board require the Applicants to implement the environmental mitigation measures included in Chapter 7 of this Final EIS as conditions in any final decision approving the proposed Conrail Acquisition.

#### 7.2 FINAL RECOMMENDED ENVIRONMENTAL CONDITIONS

Based on its independent environmental analysis of the proposed Conrail Acquisition, review of available information, and consideration of public comments, SEA recommends that any final Board decision approving the proposed Conrail Acquisition include as Conditions the mitigation measures recommended below. They are numbered 1 through 65, and are grouped into the following five categories.

- General.
- Regional.
- Local or Site-specific.
- Proposed Constructions and Abandonments.
- Safety Integration.

To facilitate a state-by-state review of SEA's final recommended mitigation, Table 7-1 identifies the final recommended mitigation measures by number for each state. Specific rail line segments, highway/rail at-grade crossings, rail yards, intermodal facilities, and communities to which local or site-specific recommended mitigation measures apply are listed within the appropriate numbered mitigation measures.

#### TABLE 7-1 FINAL RECOMMENDED CONDITIONS BY STATE

State	Recommended Environmental Conditions	
General Recommendations	Conditions 1, 2, 64, 65.	
Alabama	Conditions 4(A), (4(B), 5(A), 6.	
Connecticut	No mitigation recommended.	
Delaware	Conditions 15, 17, 58, 59.	
Florida	No mitigation recommended.	
Georgia	Conditions 3, 4(A), 4(B), 5(A), 6.	
Illinois	Conditions 1, 4(B-D), 5(A), 6, 8, 10, 12, 14, 18, 19, 20, 21, 58, 59.	
Indiana	Conditions 1, 4, 5(A), 6, 7, 8, 9, 10, 11, 22, 23, 24, 25, 53-63.	
Kentucky	Conditions 4(A), 4(B), 5(A), 6, 10.	
Louisiana	Conditions 6, 26.	
Maryland	Conditions 1, 3, 4(A), 4(B), 5(A), 6, 8, 27, 28, 58, 59.	
Massachusetts	No mitigation recommended.	
Michigan	Conditions 1, 6, 11, 58, 59.	
Mississippi	No mitigation recommended.	
Missouri	Conditions 4(A), 4(B), 5(A), 6, 8.	
New Jersey	Conditions 4, 5(A), 6, 29, 58, 59.	
New York	Conditions 1, 4, 5(A), 6, 8, 30, 57-59.	
North Carolina	Conditions 3, 4(A), 4(B), 5(A).	
Ohio	Conditions 1, 4, 5(A), 6-8, 10, 11, 13, 16, 31-54, 58-63.	
Pennsylvania	Conditions 1, 4(A), 4(B), 5(A), 6-8, 11, 55, 56.	
Rhode Island	No mitigation recommended.	
South Carolina	Conditions 4(A), 4(B), 5(A).	
Tennessee	Conditions 4(A), 4(B) 5(A), 6.	
Virginia	Conditions 1, 3, 4(A), 4(B), 5(A), 8, 11.	
West Virginia	Conditions 1, 11.	
District of Columbia	Cenditions 3, 4(A), 4(B), 5(A).	

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SEA recommends that the Board impose the following recommended environmental mitigation measures as conditions if the Board approves the proposed Conrail Acquisition. The language below refers to these recommendations as "conditions" so that the Board could adopt this language as written. In the following conditions, "Applicants" refers to CSX, NS; and the Applicants in the Shared Assets Areas (CSX, NS, or Conrail), unless otherwise specified.

The symbol "§" listed next to any rail line segment indicates information that has changed as a result of revised data provided by the Applicants late in the environmental review process. SEA's analysis of this information and rationale for recommended mitigation are included in the Addendum.

#### 7.2.1 Final Recommended General Conditions

#### Safety: Highway/Rail At-grade Crossings

Condition 1(A).

For each of the public highway/rail at-grade crossings on the 44 rail line segments identified below as having an increase in traffic of 8 or more trains per day or a 100 percent increase in annual gross ton miles, the Applicants shall provide and maintain permanent signs prominently displaying both a toll-free telephone number and a unique highway/rail at-grade crossing identification number. The toll-free number shall be answered 24 hours per day by Applicant personnel. Where Applicant rights-of-way are in close proximity, the Applicants shall coordinate and communicate with each other regarding reported accidents and crossing malfunctions. The Applicants shall certify to the Board that they have complied with this condition prior to increasing train traffic on each of these rail line segments as a result of the proposed Conrail Acquisition.

The telephone number and unique identifier can be used by the public to report malfunctioning warning devices, stalled vehicles, or other dangerous conditions at or near highway/rail at-grade crossings. SEA notes that the Applicants, in their comments, have volunteered to do this within 2 years at all crossings within their systems, including crossings on acquired segments.

#### RAIL LINE SEGMENTS WITH AN INCREASE IN TRAFFIC OF 8 OR MORE TRAINS PER DAY OR 100 PERCENT GROSS TON MILES PER DAY\*

Between (City, State)	And (City, State)	Rail Line Segment <sup>b</sup>
Proposed CSX Rail Line Segment	5	
Barr Yard, IL	Blue Island Jct., IL	C-010
Adams, IN	Ft. Wayne, IN	C-020
Willow Creek, IN	Pine Jct., IN	C-027
Point of Rocks, MD	Harpers Ferry, WV	C-036
Carleton, MI	Toledo, OH	C-040
Berea, OH	Greenwich, OH	C-061
Bucyrus, OH	Adams, IN	C-062
Crestline, OH	Bucyrus, OH	C-064
Deshler, OH	Toledo, OH	C-065
Deshler, OH	Willow Creek, IN	C-066
Greenwich, OH	Crestline, OH	C-067
Greenwich, OH	Willard, OH	C-068
Marion, OH	Fostoria, OH	C-070
Marion, OH	Ridgeway, OH	C-071
Mayfield, OH	Marcy, OH	C-072
Short, OH	Berea, OH	C-074
Willard, OH	Fostoria, OH	C-075
Rankin Jct., PA	New Castle, PA	C-082
Sinns, PA	Brownsville, PA	C-085
Sinns, PA	Rankin Jct., PA	C-086
Proposed NS Rail Line Segments		
Tilton, IL	Decatur, IL	N-033
Alexandria, IN	Muncie, IN	N-040
Butler, IN	Ft. Wayne, IN	N-041
Ft. Wayne, IN	Peru, IN	N-044
Lafayette Jct., IN	Tilton, IL	N-045
Peru, IN	Lafayette Jct., IN	N-046
Ebenezer Jct., NY	Buffalo, NY	N-061
Buffalo FW, NY	Ashtabula, OH	N-070
Bucyrus, OH	Bellevue, OH	N-071

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#### RAIL LINE SEGM) NTS WITH AN INCREASE IN TRAFFIC OF 8 OR MORE TRAINS PER DAY OR 100 PERCENT GROSS TON MILES PER DAY

Between (City, State)	And (City, State)	Rail Line Segment <sup>b</sup>
Vermilion, OH	Bellevue, OH	N-072
Fairgrounds (Columbus), OH	Bucyrus, OH	N-073
Cleveland (Cloggsville), OH	CP-190, OH	N-074 §
Ashtabula, OH	Cleveland (Cloggsville), OH	N-075
Oak Harbor, OH	Miami, OH	N-077
Oak Harbor, OH	Bellevue, OH	N-079
White, OH	Cleveland, OH	N-081
Alliance, OH	White, OH	N-084 §
Bellevue, OH	Sandusky Dock, OH	N-085
Miami, OH	Airline, OH	N-086
CP-190, OH	Berea, OH	N-293C §
Rutherford, PA	Harrisburg, PA	N-090
Harrisburg, PA	Riverton Jct., VA	N-091
Riverton Jct., VA	Roanoke, VA	N-100
Proposed Shared Assets Areas Rail Lin	e Segments	
Carleton, MI	Ecorse, MI	S-020

Several other rail line segments would meet the criterion of 8 or more trains per day, but these segments do not have at-grade crossings and therefore are not included on this table.

These site identification numbers relate to specific rail line segments and railroad facilities, such as rail yards, that are discussed throughout the Final EIS. In these rail line segment identification numbers, "C" represents CSX Transportation, Inc., and CSX Corporation (CSX); "N" represents Norfolk Southern (NS); and "S" represents proposed Shared Assets Areas of CSX, NS, and Conrail, as well as Amtrak's Northeast Corridor (NEC) that would also be shared by CSX and NS. For example, the Carleton, Michigan to Toledo, Ohio rail line segment is currently owned by CSX and is designated "C-040."

Condition 1(B).

On the 44 rail line segments listed in Condition No. 1(A), the Applicants shall install temporary notification signs or message boards at each public highway/rail at-grade crossing clearly advising motorists of the impending increase in train traffic (and train speeds if appropriate) displaying a crossing safety advisory message. These signs shall comply with the U.S. Department of Transportation, Federal Highway Administration's Manual on Uniform Traffic Control Devices and shall be in place no less than 30 days before, and 6 months after, any actual Acquisition-related increase in train traffic occurs. The Applicants shall certify to the Board that they have complied with this condition prior to increasing train traffic on these rail line segments as a result of the proposed Conrail Acquisition.

**Condition 1(C).** At each of the public highway/rail at-grade crossings on the 44 rail line segments listed in Condition No. 1(A), the Applicants shall enhance crossing safety by promptly conducting the maintenance required to attain compliance with all applicable Federal, state, and local regulations.

This maintenance could include, but is not limited to trimming vegetation on railroad property that obscures visibility of oncoming trains, assuring that rail, railroad ties, track fastenings, and ballast material are in good repair, and assuring that warning devices operate properly and are legible.

**Condition 1(D).** The Applicants shall make Operation Lifesaver programs available to communities, schools, and other organizations located along the 44 rail line segments listed in Condition No. 1(A).

Chapter 4, "Summary of Environmental Review," Section 4.2, describes the rationale for Conditions 1(A), 1(B), 1(C), and 1(D).

#### Safety: Hazardous Materials Transport

**Condition 2.** The Applicants shall comply with the current Association of American Railroads (AAR) "key train" guidelines and any subsequent revisions. (See "Recommended Railroad Operating Practices for Transportation of Hazardous Materials," AAR Circular No. OT-55-B.) Key trains are defined in the guidelines as any trains with 5 or more tank carloads of chemicals classified as a Poison Inhalation Hazard (PIH), or any train with a total of 20 rail cars with any combination of PIHs, flammable gases, explosives, or environmentally sensitive chemicals. The AAR key train guidelines include measures for a maximum operating speed of 50 mph and full train inspections by the train crew whenever a train is stopped by an emergency application of the train air brake, or as a result of a reported defect by a wayside defect detector. If an Applicant has or adopts more stringent requirements than those provided by the AAR key train guidelines, the Applicant shall comply with its own more stringent requirements.

Chapter 4, "Summary of Environmental Review," Section 4.3, describes the rationale for this condition.

#### 7.2.2 Final Recommended Regional Environmental Conditions

#### Safety: Passenger Rail Operations

**Condition 3.** For the five rail line segments listed below, where SEA identified a potential increase in train collision accident risk, CSX shall consult with the Federal Railroad Administration (FRA) and the affected passenger service agencies [MARC (the Maryland Mass Transit Administration's commuter rail service), Amtrak, and Virginia Railway Express (VRE)] to develop operational strategies and apply technology improvements to ensure that after the proposed Conrail Acquisition the safety of passenger trains is maintained at or above current levels, while operating on the same track as CSX freight trains. This consultation shall be consistent with FRA's Final Rule on Passenger Train Emergency Preparedness, issued on May 4, 1998 (49 CFR Parts 223 and 239). CSX shall report to the Board on the results of its consultations, with copies to FRA and the affected passenger service agencies, within 1 year of the effective date of the Board's final decision.

#### RAIL LINE SEGMENTS THAT WARRANT PASSENGER SAFETY MITIGATION

Proposed Owner	Rail Line Segment Description	Passenger Service Agency	Rail Line Segment ID
CSX	Washington, DC to Point of Rocks, MD	MARC, Amtrak	C-003
CSX	Savannah, GA to Jesup, GA	Amtrak	C-346
CSX	Weldon, NC to Rocky Mount, NC	Amtrak	C-334
CSX	Fredericksburg, VA to Potomac Yard, VA	Amtrak, VRE	C-101
CSX	S. Richmond, VA to Weldon, NC	Amtrak	C-103

Chapter 4, "Summary of Environmental Review," Section 4.4, describes the rationale for this condition.

#### Safety: Hazardous Materials Transport

Condition 4(A). Before increasing the number of rail cars carrying hazardous materials on the 44 rail line segments listed below that would become "key routes" as a result of the proposed Conrail Acquisition, and for a period of at least 3 years from the effective date of the Board's decision, the Applicants shall certify to the Board compliance with Association of American Railroads (AAR) key route guidelines on these rail line segments. (See "Recommended Railroad Operating Practices for Transportation of Hazardous Materials," AAR Circular No. OT-55-B.) AAR defines a key route as any rail line segment expected to carry in excess of 10,000 annual rail carloads or intermodal portable tank loads of hazardous materials. The AAR key route guidelines require several types of safety measures, including inspecting for internal rail defects at least twice per year, conducting annual employee training in hazardous materials handling and equipment inspection, placing defective wheel bearing detectors at least every 40 miles along the key routes, and other preventive measures.

Proposed Owner	Route and Segment(s)	Rail Line Segment ID
	Manchester, Georgia—Parkwood, Alabama	
CSX	La Grange, GA to Parkwood, AL	C-376
CSX	Manchester, GA to La Grange, GA	C-377
	Relay, Maryland—Washington, D.C.	
csx	Relay, MD to Jessup, MD	C-037
csx	Jessup, MD to Alexandria Jct., MD	C-034
CSX	Alexandria Jct., MD to Washington, DC	C-031
CSX	Trenton, NJ to Port Reading, NJ	C-769
CSX	Ashley Junction, SC to Yemassee, SC	C-344
	Quaker, Ohio-Berea, Ohio	
CSX	Quaker, OH to Mayfield, OH	C-073
CSX	Mayfield, OH to Marcy, OH	C-072
CSX	Marcy. OH to Short, OH	C-069
CSX	Short, OH to Berea, OH	C-074
CSX	NJ Cabin, KY to Columbus, OH	C-230
	Columbus, Ohio-Toledo, Ohio	
CSX	Columbus, OH to Marion, OH	C-229
CSX	Marion, OH to Fostoria, OH	C-070
CSX	Fostoria, OH to Toledo, OH	C-228
CSX	Deshler, OH to Toledo, OH	C-065
CSX	West Falls, Pennsylvania—Trenton, New Jersey West Falls, PA to CP Newton Jct., PA	C-766

#### RAIL LINE SEGMENTS THAT WARRANT HAZARDOUS MATERIALS (KEY ROUTE) MITIGATION

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### RAIL LINE SEGMENTS THAT WARRANT HAZARDOUS MATERIALS (KEY ROUTE) MITIGATION

Proposed Owner	Route and Segment(s)	Rail Line Segment ID
CSX	CP Newton Jct., PA to CP Wood, PA	C-767
CSX	CP Wood, PA to Trenton, NJ	C-768
	Salisbury, North Carolina-Leadvale, Tennessee	
NS	Salisbury, NC to Asheville, NC	N-360
NS	Asheville, NC to Leadvale, TN	N-361
NS	New Line, TN to Leadvale, TN	N-392
NS	Bulls Gap, TN to Frisco, TN	N-399
NS	Frisco, TN to Kingsport, TN	N-406
	Suffern, New York-Buffalo, New York	
NS	Suffern, NY to Campbell Hall, NY	N-062
NS	Campbell Hall, NY to Port Jervis, NY	N-063
NS	Port Jervis, NY to Binghamton, NY	N-245
NS	Binghamton, NY to Waverly, NY	N-246
NS	Waverly, NY to Corning, NY	N-247
NS	Corning, NY to Buffalo, NY	N-065
NS	Ebenezer Jct., NY to Buffalo, NY	N-061
NS	Butler, IN to Fort Wayne, IN	N-041
NS	Alexandria, IN to Muncie, IN	N-040
NS	Moberly, MO to CA Junction, MO	N-478
	Buffalo FW, New York-Cleveland, Ohio	State 25592 7
NS	Buffalo FW, NY to Ashtabula, OH	N-070
NS	Ashtabula, OH to Cleveland (Cloggsville), OH	N-075
NS	Cleveland (Cloggsville), OH to CP-190, OH	N-074§

Proposed Owner	Route and Segment(s)	Rail Line Segment ID
	Vermilion, Ohio-Oak Harbor, OH	
NS	Vermilion, OH to Bellevue, OH	N-072
NS	Oak Harbor, OH to Bellevue, OH	N-079
NS	Bethlehem, PA to Allentown, PA	N-203
NS	Reading, PA to Reading Belt Jct., PA	N-216
NS	Poe ML, VA to Petersburg, VA	N-432
	Park Junction, Pennsylvania—Camden, New Jersey	
Shared	Park Jct., PA to Philadelphia Frankford Jct., PA	S-232
Shared	Philadelphia Frankford Jct., PA to Camden, NJ	S-233

#### RAIL LINE SEGMENTS THAT WARRANT HAZARDOUS MATERIALS (KEY ROUTE) MITIGATION

Condition 4(B).

The Applicants shall distribute to each local emergency response organization or coordinating body in the communities along the 44 rail line segments classified as "key routes" listed in Condition 4(A) above and the 20 rail line segments classified as "major key routes" listed in Condition 4(C) below, a copy of the Applicants' current Hazardous Materials Emergency Response Plans. The Applicants shall certify to the Board compliance with this condition before increasing hazardous materials traffic on these rail line segments as a result of the proposed Conrail Acquisition. In addition, the Applicants shall distribute the Plans at least once every 3 years, or whenever the Applicants materially change them in a manner that affects the Applicants' interface with the local emergency response organizations.

For the purposes of this condition, SEA defines "major key routes" as rail line segments on which the hazardous materials rail car traffic would at least double as a result of the proposed Conrail Acquisition and exceed an annual volume of 20,000 rail carloads of hazardous materials.

Condition 4(C). For each local emergency response organization or coordinating body in the communities along the 20 rail line segments listed below, the Applicants shall develop and provide a local Hazardous Materials Emergency Response Plan, to be implemented in coordination with the Applicants' own Hazardous Materials Emergency Response Plans. The individual plans shall be consistent with the National Response Team Guidance documents NRT-1 (Planning guide), NRT1A (Criteria for Plan Review), and the U.S. Environmental Protection Agency's Technical Guidance for Hazardous Analysis or other equivalent documents that are

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used by the affected community's local emergency response organization or coordinating body. The Applicants shall certify to the Board compliance with this condition before increasing hazardous materials traffic on these rail line segments as a result of the proposed Conrail Acquisition.

Proposed Owner	Route and Segment(s)	Rail Line Segment ID
	Marion, Ohio-Toledo, Ohio	
CSX	Marion, OH to Fostoria, OH	C-070
csx	Fostoria, OH to Toledo, OH	C-228
	Quaker, Ohio-Fostoria, Ohio	
csx	Quaker, OH to Mayfield, OH	C-073
csx	Mayfield, OH to Marcy, OH	C-072
csx	Marcy, OH to Short, OH	C-069
csx	Short, OH to Berea, OH	C-074
csx	Berea, OH to Greenwich, OH	C-061
CSX	Greenwich, OH to Willard, OH	C-068
csx	Willard, OH to Fostoria, OH	C-075
CSX	Deshler, OH to Willow Creek, IN	C-066
	Butler, Indiana-Tilton, Illinois	
NS	Butler, IN to Fort Wayne, IN	N-041
NS	Fort Wayne, IN to Peru, IN	N-044
NS	Peru, IN to Lafayette Jct., IN	N-046
NS	Lafayette Jct., IN to Tilton, IL	N-045
	Buffalo FW, New York-Cleveland, Ohio	
NS	Buffalo FW, NY to Ashtabula, OH	N-070
NS	Ashtabula, OH to Cleveland (Cloggsville), OH	N-075
NS	Cleveland (Cloggsville), OH to CP-190, OH	N-074§
NS	Oak Harbor OH to Bellevue, OH	N-079

### RAIL LINE SEGMENTS THAT WARRANT HAZARDOUS MATERIALS **EMERGENCY RESPONSE (MAJOR KEY ROUTE) MITIGATION**

Proposed Conrail Acquisition

#### RAIL LINE SEGMENTS THAT WARRANT HAZARDOUS MATERIALS EMERGENCY RESPONSE (MAJOR KEY ROUTE) MITIGATION

Proposed Owner	Route and Segment(s)	Rail Line Segment ID
NS	White, OH to Cleveland, OH	N-081
Shared	PN, NJ to Bayway, NJ	S-032

Condition 4(D). The Applicants shall implement a real-time or desktop simulation emergency response drill with the voluntary participation of local emergency response organizations or coordinating bodies in affected communities along each major key route identified in Condition No. 4(C). The Applicants shall certify to the Board compliance with this condition within 2 years of the effective date of the Board's final decision.

Chapter 4, "Summary of Environmental Review," Section 4.3, describes the rationale for Conditions 4(A), 4(B), 4(C), and 4(D).

Condition 5(A). The Applicants shall provide dedicated toll-free telephone numbers to the emergency response organizations or coordinating bodies responsible for each community located along the 44 rail line segments identified in Condition No. 4(A), and the 20 rail line segments identified in Condition No. 4(C). These telephone numbers shall provide access to personnel at the Applicants' dispatch centers 24 hours per day, 7 days per week, where local emergency response personnel can quickly obtain and provide information regarding the transport of hazardous materials on a given train and appropriate emergency response procedures in the event of a train accident or hazardous materials release. The Applicants are not required to provide these telephone numbers to the general public.

The Applicants shall certify to the Board that they have complied with this condition before increasing hazardous materials traffic on these rail line segments as a result of the proposed Conrail Acquisition.

- **Condition 5(B).** As requested by the U.S. Fish and Wildlife Service (USFWS), the Applicants shall notify USFWS, and the appropriate state departments of natural resources, in the event of a reportable hazardous materials release with the potential to affect wetlands or wildlife habitat(s).
- **Condition 6.** The Applicants shall establish a formal Failure Mode and Effects Analysis (FMEA), or an equivalent program designed to identify and prevent potential causes of accidents or hazardous materials releases. The

Applicants shall establish such a program for the 15 rail yards and 24 intermodal facilities listed below where activity increases would meet or exceed the Board's threshold for environmental analysis, resulting in an increased potential risk of accidents and hazardous materials releases. The FMEA program, or its equivalent, shall be designed to reduce the risk of hazardous materials releases by identifying the potential causes and consequences of both stored and transported hazardous materials, and eliminating or reducing the likelihood of the potential causes prior to an incident. The Applicants shall certify to the Board compliance with this condition within 1 year of the effective date of the Board's final decision.

#### Proposed Location Owner Facility (City) County State Site ID **Rail Yards** CSX Boyles Birmingham Jefferson Alabama **CY01** CSX Curtis Gary Lake Indiana **CY02** CSX Rougemere Detroit Wayne Michigan CY03 CSX Stanley Toledo Wood Ohio **CY04** CSX Leewood Memphis Shelby Tennessee CY05 NS Doraville Doraville DeKalb Georgia NY01 NS Colehour Chicago Cook Illinois NY02 NS Ft. Wayne Ft. Wayne Allen Indiana NY03 NS Luther St. Louis St. Louis Missouri **NY04** NS Bison Buffalo Erie New York NY05 NS Conneaut Conneaut Ashtabula Ohio NY06 NS Homestead Toledo Ohio Lucas NY07 NS Airline Toledo Lucas Ohio NY08 Harrisburg NS Harrisburg Dauphin Pennsylvania NY09 Shared Greenwich Philadelphia Philadelphia Pennsylvania **SY01** Assets Area

#### RAIL YARDS AND INTERMODAL FACILITIES THAT WARRANT HAZARDOUS MATERIALS (FMEA) MITIGATION

Proposed Conrail Acquisition

#### RAIL YARDS AND INTERMODAL FACILITIES THAT WARRANT HAZARDOUS MATERIALS (FMEA) MITIGATION

Proposed Owner	Facility	Location (City)	County	State	Site ID
Intermoda	I Facilities				
CSX	Hulsey	Atlanta	Fulton	Georgia	CM01 ·
CSX	59th Street	Chicago	Cook	Illinois	CM02
CSX	Little Ferry	Little Ferry	Bergen	New Jersey	CM03
CSX	South Kearny	South Kearny	Hudson	New Jersey	CM04
CSX	Greenwich	Philadelphia	Philadelphia	Pennsylvania	CM05
NS	Inman	Atlanta	Fulton	Georgia	NM01
NS	Landers	Chicago	Cook	Illinois	NM02
NS	47 <sup>th</sup> Street	Chicago	Cook	Illinois	NM03
NS	Buechel	Louisville	Jefferson	Kentucky	NM04
NS	Oliver	New Orleans	Orleans	Louisiana	NM05
NS	E. Lombard St.	Baltimore	Baltimore	Maryland	NM06
NS	Melvindale	Detroit	Wayne	Michigan	NM07
NS	Voltz	Kansas City	Clay	Missouri	NM08
NS	Luther	St. Louis	St. Louis	Missouri	NM09
NS	E-Rail	Elizabeth	Union	New Jersey	NM10
NS	Sandusky	Sandusky	Erie	Ohio	NM11
NS	Discovery Park	Columbus	Franklin	Ohio	NM12
NS	New AmeriPort/ South Philadelphia	Philadelphia	Philadelphia	Pennsylvania	NM13
NS	Allentown	Allentown	Lehigh	Pennsylvania	NM14
NS	Rutherford	Harrisburg	Dauphin	Pennsylvania	NM15
NS	Morrisville	Morrisville	Bucks	Pennsylvania	NM16
NS	Pitcaim	Pittsburgh	Allegheny	Pennsylvania	NM17
NS	Forrest	Memphis	Shelby	Tennessee	NM18

	TAZARDOUS MATERIALS (1921)				
Proposed Owner	Facility	Location (City)	County	State	Site ID
Shared Assets Area	Portside	Elizabeth	Union, Essex	New Jersey	SM01

#### RAIL YARDS AND INTERMODAL FACILITIES THAT WARRANT HAZARDOUS MATERIALS (FMEA) MITIGATION

Chapter 4, "Summary of Environmental Review," Section 4.3, describes the rationale for this condition.

#### Safety: Freight Rail Operations

Condition 7. To reduce the risk of train accidents and derailments, the Applicants shall comply with the requirements in the Federal Railroad Administration's (FRA) Proposed Rule for "gross ton-mile based" inspections (49 CFR Part 213.237, Docket No. RST-90-1) on the eight rail line segments listed below.

FRA's Proposed Rule includes a provision that specifically requires railroads to conduct track inspections to detect rail flaws on a rail line segment at least once every 40 million gross ton-miles of rail traffic, or annually, whichever is more frequent. If FRA's Final Rule imposes a different inspection standard, then the Applicants shall comply with the standard in the Final Rule.

Proposed Owner	State	Counties	Description	Rail Line Segment ID
CSX	ОН	Cuyahoga, Lorain, and Huron	Berea, OH to Greenwich, OH	C-061
CSX	ОН	Huron	Greenwich, OH to Willard, OH	C-068
CSX	ОН	Huron and Seneca	Willard, OH to Fostoria, OH	C-075
NS	IN	Lake	CP 501, IN to Indiana Harbor, IN	N-042
NS	ОН	Ottawa, Wood, and Lucas	Oak Harbor, OH to Miami, OH	N-077
NS	ОН	Lucas	Miami, OH to Airline, OH	N-086
NS	ОН	Cuyahoga	CP-190, OH to Berea, OH	N-293C§
NS	PA	Dauphin	Rutherford, PA to Harrisburg, PA	N-090

#### **RAIL LINE SEGMENTS THAT WARRANT FREIGHT SAFETY MITIGATION**

Chapter 4, "Summary of Environmental Review," Section 4.5, describes the rationale for this condition.

#### 7.2.3 Final Recommended Local or Site-specific Environmental Conditions

SEA developed recommended environmental conditions to address potential local environmental impacts. The affected communities fall into two categories: (1) those communities where potential significant adverse environmental impacts met SEA's criteria for mitigation, and (2) those communities where potential adverse impacts could be considered significant when combined with unique local circumstances.

#### Safety: Highway/Rail At-grade Crossings

**Condition 8.** To address potential safety impacts at highway/rail at-grade crossings, the Applicants shall upgrade existing warning devices at 89 public highway/rail at-grade crossings as listed below. To the extent practicable, the Applicants shall prioritize for improvement those highway/rail at-grade crossings that have the greatest level of projected train traffic increases. If the Applicants execute a Negotiated Agreement with the affected local jurisdiction and the state department of transportation, they may implement alternate safety improvements in the vicinity of these identified highway/rail at-grade crossings that achieve at least an equivalent level of safety enhancement. The Applicants shall complete these upgrades or improvements within 2 years of the effective date of the Board's decision, and shall certify to the Board such completion on a quarterly basis during this 2-year period.

State	Crossing Name, County, and City	FRA ID	Rail Line Segment ID	Current Warning Device	Post- Acquisition Device
CSX					
IN	CR 9, Elkhart, Nappanee	155419P	C-066	Passive	Flashing Lights
IN	Seventh St., Kosciusko, Syracuse	155391B	C-066	Flashing Lights	Gates
IN	Huntington St., Kosciusko, Syracuse	155392H	C-066	Gates	4-Quadrant Gates, or Alternative Mitigation such as Median Barriers

#### HIGHWAY/RAIL AT-GRADE CROSSINGS THAT WARRANT SAFETY MITIGATION
State	Crossing Name, County, and City	FRA ID	Rail Line Segment ID	Current Warning Device	Post- Acquisition Device
IN	M in/Syr-Web, Kosciusko Syracuse	155394W	C-066	Flashing Lights	Gates
IN	Oak St., Kosciusko, Syracuse	155395D	C-066	Passive	Gates
IN	CR 875 E., La Porte, Walkerton	155484V	C-066	Passive	Flashing Lights
IN	500 W., La Porte, Union Mills	155496P	C-066	Passive	Gates
IN	Countyline Rd., Lake, Gary	155632M	C-027	Flashing Lights	Gates
IN	Hobart Rd., Lake, Gary	155633U	C-027	Flashing Lights	Gates
IN	Lake St., Lake, Gary	155637W	C-027	Gates	4-Quadrant Gates, or Alternative Mitigation such as Median Barriers
IN	Clarke Rd., Lake, Gary	155645N	C-027	Flashing Lights	Gates
IN	First Rd., Smith, Marshall, Teegarden	155465R	C-066	Passive	Gates
IN	Thorn Rd., Marshall, Walkerton	155476D	C-066	Passive	Gates
IN	CR 500 W., Noble, Kimmell	155372W	C-066	Passive	Gates
IN	900 W., Noble, Cromwell	155380N	C-066	Passive	Flashing Lights
IN	900 N., Porter, Portage	155615W	C-066	Gates	4-Quadrant Gates, or Alternative Mitigation such as Median Barriers
OH	Marsh Rd., Hardin	518382H	C-071	Passive	Flashing Lights
OH	Main St., Henry, Deshler	155755Y	C-065	Flashing Lights	Gates
ОН	North St., Henry, Deshler	155760V	C-065	Passive	Gates
ОН	Townline Rd., Huron, New London	514488D	C-061	Passive Gate	

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State	Crossing Name, County, and City	FRA ID	Rail Line Segment ID	Current Warning Device	Post- Acquisition Device
OH	Main St., Seneca, Fostoria	228774H	C-070	Passive	Flashing Lights
СН	TWP 0180, Seneca, Fostoria	228780L	C-070	Passive	Gates
КО	Range Line Rd., Wood, Bowling Green	155789T	C-065	Passive	Flashing Lights
OH	Kellogg Rd., Wood, Bowling Green	155794P	C-065	Passive	Gates
он	Washington St., Wood, Tontogony	155798S	C-065	Passive	Flashing Lights
OH	Tontogony Rd., Wood Tontogony	155799Y	C-065	Passive	Flashing Lights
OH	Middletown Pike, Wood, Haskins	155804T	C-065	Passive	Flashing Lights
OH	Fire Point Rd., Wood, Perrysburg	155812K	C-065	Passive	Flashing Lights
OH	Roachton Rd., Wood, Perrysburg	155814Y	C-065	Passive	Flashing Lights
OH	Eckel Jct. Rd., Wood, Perrysburg	155818B	C-065	Passive	Flashing Lights
OH	Eckel Rd., Wood, Perrysburg	155819H	C-065	Passive	Flashing Lights
OH	Eckel Rd., Wood, Perrysburg	155820C	C-065	Passive	Flashing Lights
OH	W. Boundary St., Wood, Perrysburg	155821J	C-065	Gates	4-Quadrant Gates, or Alternative Mitigation such as Median Barriers
OH	Ford Rd., Wood, Rossford	155838M	C-065	Passive	Gates
OH	Bates Rd., Wood, Rossford	155839U	C-065	Passive	Gates
OH	Schrick Rd., Wood, Rossford	155840N	C-065	Passive	Flashing Lights
NS					
IL	TR 145, Piatt, Ivesdale	479957T	N-033	Passive	Flashing Lights
IN	Notestine Rd., Allen, Graybill	478188C	N-041	Passive	Flashing Lights
IN	Estella Ave., Allen, New Haven	478216D	N-041	Flashing Lights	Gates

State	Crossing Name, County, and City	FRA ID	Rail Line Segment ID	Current Warning Device	Post- Acquisition Device
IN	Anthony Blvd., Allen, Ft. Wayne	478226J	N-041	Gates	4-Quadrant Gates, or Alternative Mitigation such as Median Barriers
IN	Engle Rd., Allen, Ft. Wayne	478240E	N-044	Flashing Lights	Gates
IN	Washington St./CR 100 E., Carroll, Burrows	484246J	N-046	Passive	Flashing Lights
IN	Meridian Line, Carroll, New Waverly	484248X	N-046	Passive	Flashing Lights
IN	Cedar St., Cass, Logansport	484216S	N-046	Passive	Flashing Lights
IN	18th St., Cass, Logansport	484229T	N-046	Flashing Lights	Gates
IN	Briant St., Huntington, Huntington	478270W	N-044	Flashing Lights	Gates
IN	CR 100 E., Madison, Alexandria	4745-8M	N-040	Passive	Flashing Lights
IN	CR 250 W., Miami, Peru	484209G	N-046	Passive	Flashing Lights
IN	Smith St., Tippecanoe, West Point	484311M	N-046	Flashing Lights	Gates
IN	CR 400 S., Tippecanoe, West Point	4843195	N-045	Passive	Flashing Lights
IN	CR 172, Tippecanoe, West Point	484323G	N-045	Passive	Gates
IN	4 <sup>th</sup> Street/US 231, Tippecanoe, Lafayette	484309L	N-046	Gates	4-Quadrant Gates, or Alternative Mitigation such as Median Barriers
IN	5th St., Tippecanoe, Lafayette	484308E	N-046	Passive	Gates
IN	Romig St., Tippecanoe, Lafayette	484306R	N-046	Flashing Lights	Gates

Proposed Conrail Acquisition

State	Crossing Name, County, and City	FRA ID	Rail Line Segment ID	Current Warning Device	Post- Acquisition Device
IN	7 <sup>th</sup> St., Tippecanoe, Lafayette	<b>484303</b> ∨	N-046	Flashing Lights	Gates
IN	8th St., Tippecanoe, Lafayette	484302N	N-046	Passive	Gates
IN	Union St., Tippecanoe, Lafayette (Note: Because this is a one-way street, four-quadrant gates or median barriers are not appropriate mitigation for this crossing; therefore SEA recommends this alternative mitigation.)	484294Y	N-046	Gates	Alternative Mitigation such as adding or improving pavement markings or installing additional warning signs
IN	17 <sup>th</sup> & Salem, Tippecanoe, Lafayette	4842935	N-046	Flashing Lights	Gates
IN	18 <sup>th</sup> St., Tippecanoe, Lafayette	484292K	N-046	Flashing Lights	Gates
IN	Greenbush St., Tippecanoe, Lafayette	484291D	N-046	Flashing Lights	Gates
IN	CR 500 E., Tippecanoe, Buck Creek	484282E	N-046	Passive	Flashing Lights
IN	CR 700 N., Tippecanoe, Colburn	484269R	N-046	Passive	Gates
IN	CR 900 N., Tippecanoe, Colburn	484267C	N-046	Passive	Gates
IN	Olive St., Wabash, Wabash	478313M	N-044	Passive	Gates
MD	Reiff Church Rd., Washington, Mauginsville	534883D	N-091	Passive	Flashing Lights
MD	Shawley Dr., Washington, Mauginsville	534887F	N-091	Passive	Flashing Lights
NY	Loomis St., Chautauqua, Ripley	471825F	N-070	Passive	Flashing Lights
он	Andrews, Crawford, Bucyrus	481572C	N-071	Passive	Gates
OH	Hopley, Crawford, Bucyrus	481561P	N-073	Gates	4-Quadrant Gates, or Alternative Mitigation such as Median Barriers

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State	Crossing Name, County, and City	FRA ID	Rail Line Segment 1D	Current Warning Device	Post- Acquisition Device
OH	Bradshar, Erie, Sandusky	481659T	N-085	Passive	Flashing Lights
OH	Skadden/CR 42, Erie, Sandusky	481660M	N-085	Passive	Flashing Lights
ОН	Galion-Marseilles, Marion, Marion	481546M	N-073	Passive	Flashing Lights
ОН	Scott Twp. Rd. 190, Marion, Marion	481547U	N-073	Passive	Flashing Lights
ОН	Kilbourne, Sandusky, Bellevue	473668W	N-079	Gates	4-Quadrant Gates, or Alternative Mitigation such as Median Barriers
OH	CR 292, Sandusky, Bellevue	473673T	N-079	Passive	Flashing Lights
он	Fangboner Road, Sandusky, Kingsway	473726P	N-079	Passive	Flashing Lights
PA	York Rd./SR 74, Cumberland, Mechanicsburg	592290T	N-091	Gates	4-Quadrant Gates, or Alternative Mitigation such as Median Barriers
PA	Criswall, Cumberland, Mechanicsburg	592295C	N-091	Passive	Flashing Lights
PA	Mill, Cumberland, Mechanicsburg	592320H	N-091	Passive	Flashing Lights
PA	Peach St., Erie, Erie	471901W	N-070	Gates	Relocate to CSX corridor*
PA	Cherry St., Erie, Erie	471906F	N-070	Flashing Lights	Relocate to CSX corridor*
PA	Raspberry St., Erie, Erie	471911C	N-070	Flashing Lights	Relocate to CSX corridor*
PA	Lucas Road, Erie, Erie	471940M	N-070	Passive	Flashing Lights
PA	Guilford Springs Rd., Franklin, Guilford Springs	535146X	N-091	Passive	Flashing Lights
PA	Alleman, Franklin, Marion	535151U	N-091	Passive	Flashing Lights
PA	Hayes Rd., Franklin, Milner	535163N	N-091	Passive	Flashing Lights

Proposed Conrail Acquisition

State	Crossing Name, County, and City	FRA ID	Rail Line Segment ID	Current Warning Device	Post- Acquisition Device
VA	SR 7, Clarke, Berryville	468599F	N-091 Gates 4 G A M a B		4-Quadrant Gates, or Alternative Mitigation such as Median Barriers
VA	Rockland Rd., Warren, Winchester	468634S	N-091	Flashing Lights	Gates
Shared					
МІ	Pennsylvania Rd., Wayne, Taylor	511027V	S-020	Flashing Lights	Gates

Recommendation from highway/rail at-grade crossing delay analysis.

Chapter 4, "Summary of Environmental Review," Section 4.2, describes the rationale for this condition.

#### Transportation: Highway/Rail At-grade Crossing Delay

**Condition 9.** CSX shall continue negotiations with De Kalb County, Indiana; the City of Garrett, Indiana; and the Indiana Department of Transportation for the expeditious implementation of a grade separation at CSX's Randolph Street highway/rail at-grade crossing in Garrett. If the parties have not reached agreement within 6 months following the effective date of the Board's decision on the proposed Conrail Acquisition, CSX shall, with the concurrence of the other parties, participate in and assume the cost of binding arbitration or mediation. Because of the significant impact of Acquisition-related actions on traffic delay, the Board believes that the CSX share of the costs for design and construction of the grade separation should be substantially more than the traditional railroad share for similar projects, which is 5% for Indiana. The results of the negotiations or arbitration shall be final and binding on CSX, and without further involvement or review by the Board. CSX shall notify the Board within 30 days of completing the negotiations or arbitration.

Chapter 4, "Summary of Environmental Review," Section 4.7, describes the rationale for this condition.

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Condition 10. The Applicants shall develop and implement railroad operational improvements for the portions of the rail line segments located near the seven highway/rail at-grade crossings listed below. The Applicants shall implement such railroad operational improvements to materially reduce the total amount of time that these highway/rail at-grade crossings are blocked by trains. These improvements could include, but are not limited to, installing constant warning time devices, increasing train speeds, improving track infrastructure, and removing conditions that require a train to stop while blocking the roadway crossing or to travel at speeds slower than the timetable speed limit—all to be implemented in a manner consistent with safe operating practices.

State	County, City	Crossing Name	Current Warning Device Type	Level of Service Change	Proposed Owner	Rail Line Segment ID	FRA Crossing ID
IL	Cook, Blue Island	Dixie Hwy.	Gates	B to D	CSX	C-010	163415H
IL	Cook, Blue Island	Broadway - 135 <sup>th</sup> St.	Gates	B to D	CSX	C-010	163416P
IN	Madison, Alexandria	SR 9	Flashing Lights	> 30- second delay	NS	N-040	474600L
IN	Madison, Alexandria	Harrison St.	Gates	> 30- second delay	NS	N-040	474601T
КҮ	Hopkins, Madisonville	W. Noel Ave.	Flashing lights	C to D	CSX	C-021 .	3453315
он	Butler, Hamilton	Vine St.	Gates	C to D	CSX	C-063	152407K
ОН	Hamilton, Cincinnati	Township Ave.	Gates	C to D	CSX	C-063	152355V

#### HIGHWAY/RAIL AT-GRADE CROSSINGS THAT WARRANT TRAFFIC DELAY MITIGATION

Chapter 4, "Summary of Environmental Review," Section 4.7, describes the rationale for this condition.

Noise

Condition 11.

The Applicants shall mitigate train wayside noise (locomotive engine and wheel/rail noise) at noise-sensitive receptor locations on the rail line segments listed below within the noise contour boundary established for each segment. With the written concurrence of the responsible local government(s), the Applicants shall mitigate wayside noise with either noise barriers or building sound insulation treatments, including airconditioning if appropriate. The design goal for noise barriers and sound insulation treatments shall be a 10-decibel (dBA) noise reduction. The minimum noise reduction achieved shall be 5 dBA. Noise barrier performance shall be determined in accordance with ANSI S12.8-1987, American National Standard Methods for Determination of Insertion Loss of Outdoor Noise Barriers. Sound insulation performance shall be determined in accordance with ASTM 966-90, Standard Guide For Field Measurements of Airborne Sound Insulation of Building Facades and Facade Elements. The Applicants shall certify compliance with this condition within 2 years of the effective date of the Board's final decision. This condition shall not apply to those communities that have executed Negotiated Agreements with the Applicants that satisfy the communities' environmental concerns.

Should noise mitigation be selected at locations identified as containing structures that are potentially eligible for listing on the National Register of Historic Places, the Applicants shall consult with the appropriate State Historic Preservation Officer to assess effects and implement appropriate mitigation measures.

	Distance to 70	Distance to 70 Sound		Total	Rail Line Segment ID
Rail Line Segment Description (Communities*)	dBA L <sub>ds</sub> Noise Contour (in feet)		Yes	Number of Receptors	
CSX					
Warsaw, IN to Tolleston, IN (Etna Green, Plymouth)	56	0	3	3	C-026
Berea, OH to Greenwich, OH (Berea, Olmsted Falls, Eaton Estates CDF, Grafton, Lagrange, Wellington, Rochester, New London)	246	15	246	261	C-061

#### **RECEPTORS THAT MEET WAYSIDE NOISE MITIGATION CRITERIA**

#### **RECEPTORS THAT MEET WAYSIDE NOISE MITIGATION CRITERIA**

)	Distance to 70	Affected by Horn Sounding		d by n ing Total	
Rail Line Segment Description (Communities*)	dBA L <sub>dn</sub> Noise Contour (in feet)	No	Yes	Number of Receptors	Rail Line Segment ID
Deshler, OH to Toledo, OH (Perrysburg, Haskins, Tontogany, Weston, Milton Center, Custer, Deshler)	108	6	71	77	C-065
Mayfield, OH to Marcy, OH (Cleveland, Cuyahoga Heights)	218	95	0	95	C-072
Quaker, OH to Mayfield, OH (Cleveland)	218	206	0	206	C-073
Short, OH to Berea, OH (Middleburg Heights, Berea)	229	32	40	72	C-074
Sinns, PA to Brownsville, PA (McKeesport, Glassport, Lincoln, Elizabeth, Bunola, Elkhorn, East Monongahela, Manown, Gallatin, Sunny Side, Milesville, Webster, Belle Vernon, Fayette, Newell)	91	58	91	149	C-085
NS					
Alexandria, IN to Muncie, IN (Alexandria, Muncie)	72	0	6	6	N-040
Cleveland (Cloggsville), OH to CP-190, OH (Cleveland, Brooklyn, Linndale)	80	20	0	20	N-074§
Oak Harbor, OH to Bellevue, OH (Kingsway, Booktown, Fremont, Clyde)	122	13	55	68	N-079
Bellevue, OH to Sandusky Dock, OH (Weyers, Parkertown)	76	0	2	2	N-085
Riverton Junction, VA to Roanoke, VA (Front Royal, Bentonville, Kimball, Luray, Stanley, Ingham, Shenandoah, Elkton, Lynnwood, Grottoes, Crimora, Waynesboro, Lyndhurst, Cold Spring, Vesuvius, Midvale, Cornwall, Buena Vista, Glasgow, Buchanan, Lithia, Troutville, Cloverdale, Hollins)	73	16	47	63	N-100
Fola Mine, WV to Deepwater, WV (Jefferson, Gauley Bridge, Falls View)	24	3	0	3	N-111

	Distance to 70	Affected by Horn Sounding		Total	
Rail Line Segment Description (Communities*)	dBA L <sub>dn</sub> Noise Contour (in feet)	No	Yes	Number of Receptors	Rail Line Segment ID
Shared					
Carleton, MI to Ecorse, MI (Lincoln Park, Allen Park, Taylor, Brownstown, Hurcn, Carleton)	93	15	12	27	S-020
Total Nu	nber of Receptors	459	575	1,034	

#### **RECEPTORS THAT MEET WAYSIDE NOISE MITIGATION CRITERIA**

Data source: De Leuw, Cather & Company and U.S. Geological Survey maps.

Chapter 4, "Summary of Environmental Review," Section 4.12, describes the rationale for this condition.

#### **Cultural Resources**

Condition 12. CSX shall undertake no construction of a new rail line connection in Exermont, Illinois, until completion of the Section 106 process of the National Historic Preservation Act (16 U.S.C. 470f, as amended) in connection with the Mees-Notcha archaeological site.

Chapter 4, "Summary of Environmental Review," Section 4.13, describes the rationale for this condition.

Condition 13. CSX shall, with concurrence from the Ohio State Historic Preservation Office, complete cultural resource documentation for the Lake Shore & Michigan Southern Railroad (New York Central Railroad) Shops District in the Collinwood rail yard in Cleveland, Ohio, as soon as practicable.

Chapter 4, "Summary of Environmental Review," Section 4.13, describes the rationale for this condition.

**Condition 14.** CSX shall not alter the historic integrity of the 75<sup>th</sup> Street Interlocking Tower in Chicago, Illinois, until completion of the Section 106 process of the National Historic Preservation Act (16 U.S.C. 470f, as amended).

Chapter 4, "Summary of Environmental Review," Section 4.13, describes the rationale for this condition.

Condition 15. NS shall not alter the historic integrity of the Shellpot Bridge in Wilmington, Delaware, until completion of the Section 106 process of the National Historic Preservation Act (16 U.S.C. 470f, as amended). NS shall conduct a feasibility study including preliminary design for the rehabilitation of the Shellpot Bridge. NS shall provide the Delaware State Historic Preservation Office a copy of this study for its review within 180 days following the effective date of the Board's final decision.

Chapter 4, "Summary of Environmental Review," Section 4.13, describes the rationale for this condition.

#### Natural Resources

**Condition 16.** Before initiating any construction of the proposed rail line connection in Vermilion, Ohio, NS shall coordinate with the U.S. Fish and Wildlife Service and the Ohio Department of Natural Resources to determine the potential presence of the endangered Indiana bat and any other Federally listed endangered or threatened species. If such species are found to be present and potentially adversely affected, NS shall proceed with applicable measures to comply with Section 7 of the Endangered Species Act.

Chapter 4, "Summary of Environmental Review," Section 4.15, describes the rationale for this condition.

#### Newark, Delaware

Condition 17. CSX shall comply with the terms and conditions of its executed Negotiated Agreements with the City of Newark, Delaware, the Newark Methodist Cemetery, and the University of Delaware.

#### Chicago, Illinois

Condition 18(A). CSX shall comply with the terms and conditions of its executed Negotiated Agreement with Metra (the primary commuter rail service in Chicago) regarding passenger train priorities through the 75<sup>th</sup> Street/Forest Hill Interlocking. Should CSX acquire control of the Indiana Harbor Belt Railroad (IHB), CSX shall comply with the terms and conditions of the executed Negotiated Agreement with Metra regarding passenger train priorities through the the IHB-controlled interlocking where Metra services operate. **Condition 18(B).** CSX shall comply with mitigation provisions included in its permit applications approved by the City of Chicago for the proposed 59<sup>th</sup> Street intermodal facility.

Note: Conditions 1, 6, and 14 also apply to the City of Chicago.

#### Danville, Illinois

**Condition 19.** NS shall comply with the terms and conditions of its Negotiated Agreement with the City of Danville, Illinois.

Note: Conditions 1, 4(C), and 5(A) also apply to the City of Danville.

#### **Tilton**, Illinois

**Condition 20.** NS shall comply with the terms and conditions of its Negotiated Agreement with the City of Tilton, Illinois.

Note: Conditions 1, 4(B-D), and 5(A) also apply to the City of Tilton.

#### Tolono, Illinois

Condition 21. As stated in its Primary Application filed June 23, 1997, NS shall limit construction of the Tolono Connection to within the existing railroad right-of-way, so as to avoid permanent, adverse effects on Daggy Street or nearby residential properties.

Chapter 5, "Summary of Comments and Responses," Section 5.3.6, describes the rationale for this condition.

Note: Condition 1 also applies to the City of Tolono.

#### Alexandria, Indiana

Condition 22. As agreed to by NS, NS shall install flashing lights and gates at highway/rail at-grade crossings at Berry, Broadway, and Washington Streets.

Note: Conditions 1, 4(A), 4(B), 5(A), 8, 10, and 11 also apply to the City of Alexandria.

#### Attica, Indiana

- Condition 23(A). NS shall, with the advice and consent of City of Attica, Indiana, adapt and modify the local component of its required Hazardous Materials Emergency Response Plan to account for the special needs of minority and low-income populations adjacent to or in the immediate vicinity of its rail line segment(s) in Attica. NS shall certify compliance with this condition within 6 months of the effective date of the Board's decision.
- Condition 23(B). NS shall provide and install, including any necessary computer hardware and training, Operation Respond software at the local emergency response center serving minority and low-income populations adjacent to or in the immediate vicinity of its rail line segment(s) in Attica. NS shall certify compliance with this condition within 6 months of the effective date of the Board's decision.

### **Condition 23(C).** As agreed to by NS, NS shall fund participation in a training session at the national training center in Pueblo, Colorado, for two representatives of the emergency response provider for the City of Attica, Indiana.

Note: Conditions 1, 4(B-D), and 5(A) also apply to the City of Attica.

#### East Chicago, Hammond, Gary, and Whiting, Indiana (Four City Consortium)

## Condition 24. CSX shall alleviate Acquisition-related highway/rail at-grade crossing traffic delay and safety concerns in East Chicago, Hammond, Gary, and Whiting, Indiana, through operational improvements and safety measures, as follows:

- a) CSX shall upgrade the highway/rail at-grade crossing signal warning systems with constant warning time circuits to reduce crossing blockage time and the likelihood of motorists driving around the gate at the highway/rail at-grade crossings listed below on the Pine Junction-to-Barr Yard rail line segment (C-023) and the Tolleston-to-Clark Junction rail line segment (C-024).
  - Sheffield Avenue (C-023)
  - Hohman Avenue (C-023)
  - Calumet Avenue (C-023)
  - Columbia Avenue (C-023)
  - Indianapolis Boulevard (C-023)
  - Railroad Avenue (C-023)
  - Kennedy Avenue (C-023)
  - 5<sup>th</sup> Avenue (U.S. 20) (C-024)

#### Chapter 7: Recommended Environmental Conditions

b) CSX shall make Operation Lifesaver programs available to schools and other community organizations in the vicinity of the Pine Junction-to-Barr Yard rail line segment (C-023), Tollestonto-Clark Junction rail line segment (C-024), and the Tolleston-to-Hobart portion of the Warsaw-to-Tolleston rail line segment (C-026).

c) As agreed to by CSX, CSX shall upgrade the track structure and signal systems to allow 40 mph train operations, consistent with safe operating practices, between Pine Junction and Barr Yard.

- d) CSX shall install temporary notification signs or message boards consistent with Condition No. 1(B) at least 30 days before initiating new train traffic between the Tolleston and Clark Junction rail line segment (C-024), and the Hobart-to-Tolleston portion of the Warsaw-to-Tolleston rail line segment (C-026). CSX shall certify to the Board that it has complied with this condition before increasing traffic on these rail line segments.
- e) CSX shall improve coordination between Pine Junction and Barr Yard at Indiana Harbor Belt Railroad interlockings where CSX rail lines cross or join, to reduce railroad congestion and blockage at highway/rail at-grade crossings to the extent practicable.
- f) As agreed to by CSX, CSX shall reroute train traffic as much as practicable from the Pine Junction-to-Barr Yard rail line segment (C-023) to other rail lines in the area.
- g) As agreed to by CSX, CSX shall instruct its train crews not to stop trains in positions where they would block major highway/rail at-grade crossings identified by the Four City Consortium on the Pine Junction-to Barr Yard rail line segment whenever practicable and consistent with safe operating practices.
- h) As agreed to by CSX, CSX shall work with the Four City Consortium to better coordinate train movements and emergency response. If practicable, CSX shall install a train location system by interconnecting the grade crossing warning devices to nearby traffic signals, and provide a display in the local emergency response center showing the position of the grade crossing warning signals.

i) The Applicants shall attend regularly scheduled meetings with representatives of the Four City Consortium for 3 years following the effective date of the Board's final decision. Representatives of the Indiana Harbor Belt Railroad shall also be invited. These meetings would provide a forum for assessing traffic delay, emergency response, and driver compliance with railway grade crossing warning systems through improved education and enforcement.

Chapter 4, "Summary of Environmental Review," Section 4.19.3, describes the rationale for this condition.

Note: Conditions 1, 6, and 8 also apply to East Chicago, Gary, Hammond, and Whiting.

#### Lafayette, Indiana

Condition 25(A).	NS shall, with the advice and consent of the City of Lafayette, Indiana, adapt and modify the local component of its required Emergency Response Plan to account for the special needs of minority and low- income populations adjacent to or in the vicinity of its rail line segment(s) in Lafayette. NS shall certify compliance with this condition within 6 months of the effective date of the Board's decision.
Condition 25(B).	NS shall provide and install, including any necessary computer hardware and training, Operation Respond software at the local emergency response center serving minority and low-income populations adjacent to or in the immediate vicinity of its rail line segment(s) in Lafayette. NS shall certify compliance with this condition within 6 months of the effective date of the Board's decision.
Condition 25(C).	As agreed to by NS, NS shall fund participation in a training session at the national training center in Pueblo, Colorado, for two representatives of the emergency response provider for the City of Lafayette, Indiana.
Note: Conditions	1, 4(B-D), 5(A), and 8 also apply to the City of Lafayette.
New Orleans, Loui	isiana

Condition 26. As agreed to by CSX, CSX shall develop, in coordination with the City of New Orleans, Louisiana, a hazardous materials emergency response program.

Note: Condition 6 also applies to the City of New Orleans.

Proposed Conrail Acquisition

Maryland

Condition 27. CSX shall comply with the terms and conditions of its Negotiated Agreement with the State of Maryland.

**Condition 28.** NS shall comply with the terms and conditions of its Negotiated Agreement with the State of Maryland.

#### New Jersey Department of Transportation

Condition 29. The Applicants shall comply with the terms and conditions of their Negotiated Agreements with New Jersey Department of Transportation.

#### **Dunkirk**, New York

Condition 30. As agreed to by NS, NS shall implement its Trespasser Abatement Program to reduce trespassing along the NS right-of-way in the City of Dunkirk, New York, and make Operation Lifesaver presentations available to Dunkirk schools and community organizations.

Note: Conditions 1, 4, and 5(A) also apply to the City of Dunkirk.

#### Ashtabula, Ohio

Condition 31. With the concurrence of the City of Ashtabula, Ohio, NS shall provide, install, and maintain a real-time train location monitoring system to improve local emergency response vehicle dispatching. At a minimum, the system shall use appropriate technology to detect trains approaching the city on NS rail line segments N-070, N-075, and N-082 and shall display the train locations at an emergency response center to be specified by the City.

Chapter 4, Summary of Environmental Review," Section 4.7 provides a more detailed description of the system and its requirements.

Note: Conditions 1, 4, and 5(A) also apply to the City of Ashtabula.

#### **Bellevue**, Ohio

**Condition 32.** NS shall comply with the terms and conditions of its Negotiated Agreement executed with the City of Bellevue, Ohio.

Note: Conditions 1, 4, 5(A), and 8 also apply to the City of Bellevue.

#### Berea, Ohio

Condition 33. With the concurrence of the City of Berea, Ohio, the Applicants shall provide, install, and maintain a real-time train location monitoring system to improve local emergency response vehicle dispatching. At a minimum, the system shall use appropriate technology to detect trains approaching the city on the Applicants' rail line segments C-061, C-074, N-293C and shall display the train locations at an emergency response center to be specified by the City.

Chapter 4, Summary of Environmental Review," Section 4.7 provides a more detailed description of the system and its requirements.

- **Condition 34(A).** CSX shall, with the advice and consent of the City of Berea, Ohio, adapt and modify the local component of its required Hazardous Materials Emergency Response Plan to account for the special needs of minority and low-income populations adjacent to or in the immediate vicinity of its rail line segment(s) in Berea. CSX shall certify compliance with this condition within 6 months of the effective date of the Board's decision.
- **Condition 34(B).** CSX shall provide and install, including any necessary computer hardware and training, Operation Respond software at the local emergency response center serving minority and low-income populations adjacent to or in the immediate vicinity of its rail line segment(s) in Berea. CSX shall certify compliance with this condition within 6 months of the effective date of the Board's decision.
- **Condition 34(C).** As agreed to by CSX, CSX shall fund participation in a training session at the national training center in Pueblo, Colorado, for a representative of the emergency response provider for the City of Berea, Ohio.

Note: Conditions 1, 4, 5(A), 7, and 11 also apply to the City of Berea.

#### Brook Park, Ohio

Condition 35. CSX shall comply with the terms and conditions of its Negotiated Agreement dated February 17, 1998 with the City of Brook Park, Ohio.

Note: Conditions 1, 4, 5(A), and 7 also apply to the City of Brook Park.

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#### **Brook Park and Olmsted Falls, Ohio**

Condition 36. The Applicants shall comply with the terms and conditions of their Negotiated Agreement dated February 24, 1998 with the Cities of Brook Park and Olmsted Falls, Ohio.

Note: Conditions 1, 4, 5(A), 7, and 11 also apply to the Cities of Brook Park and Olmsted Falls.

#### Cleveland, Ohio

- **Condition 37(A).** The Applicants shall, with the advice and consent of the City of Cleveland, Ohio, adapt and modify the local component of their required Hazardous Materials Emergency Response Plans to account for the special needs of minority and low-income populations adjacent to or in the immediate vicinity of their rail line segments in Cleveland. The Applicants shall certify compliance with this condition within 6 months of the effective date of the Board's decision.
- **Condition 37(B).** The Applicants shall provide and install, including any necessary computer hardware and training, Operation Respond software at the local emergency response center serving minority and low-income populations adjacent to or in the immediate vicinity of their rail line segments in Cleveland. The Applicants shall certify compliance with this condition within 6 months of the effective date of the Board's decision.
- **Condition 37(C).** As agreed to by the Applicants, the Applicants shall fund participation in a training session at the national training center in Pueblo, Colorado, for two representatives of the emergency response provider for the City of Cleveland, Ohio.
- **Condition 37(D).** As agreed to by CSX, CSX shall install emergency vehicle access points in appropriate locations approximately every half mile on the grade separated Marcy-to-Short rail line segment.
- **Condition 37(E).** As agreed to by CSX, CSX shall make traffic and signal improvements along 152<sup>nd</sup> Street to improve the movement of trucks to the Collinwood intermodal facility.
- **Condition 37(F).** With the advice and consent of the City of Cleveland, the Applicants shall construct and maintain, where not already present, fencing and landscaping adequate to prevent, reduce, or discourage pedestrian access to rail lines and facilities in the City of Cleveland at the locations identified below. Such fencing and landscaping shall be constructed and maintained at the following types of locations:

- On portions of rail line segments traversing residential areas.
- Adjacent to all schools, parks, or other recreational areas.
- Where noise walls are not used that would otherwise serve the same purpose for restricting access or where existing landscaping would effectively serve the same purpose.
- Where not constrained by right-of-way, safety, rail maintenance, and operational needs.

#### LOCATIONS REQUIRING FENCING AND LANDSCAPING IN THE CITY OF CLEVELAND

Rail Line Segment	Location
CSX	
C-060	Collinwood area - Aspenwall Avenue/Cobalt Avenue area
C-691	Martin L. King, Jr. Drive to Eddy Road
C-073	East 125th Street to Cornell Road
C-072	Woodland Avenue to Union Avenue, Deveney Avenue, and East 77th Street areas
NS	
N-075	Nottingham Road to Ivanhoe Road, East 125th Street to Cornell Road, East 106th Street area
N-081/N-504	Mill Creek area at Harvard Connection
N-081	Broadway to Union Avenue, Platt Avenue area, Euclid Avenue area, Front Avenue (The
N-293	West Boulevard area, Mohican Park, West 140th Street area, Elanore Drive area.
N-074	Dennison Avenue/Train Avenue area, Briggs Road area, West 130th Street area

**Condition 37(G).** As offered by NS, NS shall provide up to \$1.5 million to the City of Cleveland to fund the non-public funded portion of two proposed grade separations at Dille Road and London Road.

Note: Conditions 1, 4, 7, 11 and 13, also apply to the City of Cleveland.

#### Greater Cleveland Area, Ohio

Condition 38(A). As agreed to by NS, NS shall implement and fund the track structure and signal system modifications necessary for its proposed Cloggsville routing alternative. Also, NS shall implement its proposed train routing according to its revised Operating Plan as specified in its "Norfolk Southern Mitigation Proposal for Train Frequencies in Greater Cleveland and Vicinity, Environmental Report," dated April 15, 1998. Chapter 4, "Summary of Environmental Review," Section 4.19, describes the rationale for this condition.

- Condition 38(B). The Applicants shall each assign to the Greater Cleveland Area fully trained supervisory personnel with sufficient authority to mobilize additional Applicant or contractor emergency response personnel and equipment and to coordinate with local authorities in the event of a rail accident or hazardous materials release. These personnel shall be locally stationed, available 24 hours a day, 7 days a week, and shall be prepared to initiate a response within 30 minutes of notification.
- **Condition 38(C).** The Applicants shall install and maintain additional train defect detection devices to scan all their trains entering the Greater Cleveland Area, as specified below.

Installing and operating these supplemental devices will reduce the probability of freight train accidents and hazardous materials incidents by detecting high, wide, and shifted loads; defective wheel bearings; dragging equipment; and other possible defects that could contribute to an accident. See Chapter 4, Section 4.19.1 for additional discussion.

Proposed Owner	Nearest Community	Rail Line Segment	Approx. Railroad Milepost (MP)	Proposed Improvements at Existing Defect Detector Locations		Proposed New Defect Defector Locations & Improvements
				Existing Detection	Proposed Detection	•
CSX	Wickliffe	C-060A	165	HBD DED	HWI WILD	•
CSX	Collinwood	C-060B	179	HBD DED	NONE	
CSX	Olmsted Falls	C-061	19	HBD DED	HWI WILD	•
CSX	Kinsman Area	C-072A	5	•	-	HBD DED
CSX	Brooklyn Area	C-069	16	-		HBD DED
NS	Wickliffe	N-075A	169	HBD DED	HWI WILD	-

#### **ENHANCED TRAIN DEFECT DETECTION - GREATER CLEVELAND AREA**

Proposed Conrail Acquisition

Proposed Owner	Nearest Community	Rail Line Segment	Approx. Railroad Milepost (MP)	Proposed Improvements at Existing Defect Detector Locations		Proposed New Defect Defector Locations & Improvements
				Existing Detection	Proposed Detection	
NS	Cloggsville	N-075D	185	See Note "A"		Track 2: HBD DED
NS	Rocky River	N-080B	201	HBD DED	HWI WILD	
NS	Cleveland	N-293B	186	•	•	HBD DED
NS	Oimsted Fails	N-293D	200	HBD DED	HWI WILD	•
NS	White	N-081A	113	Track 1: HBD DED	Track 1: HWI WILD	Track 2: HBD HWI DED WILD

#### ENHANCED TRAIN DEFECT DETECTION - GREATER CLEVELAND AREA

HBD = Hot Bearing Detector

DED = Dragging Equipment Detector

HWI = Shifted Load/High-Wide Indicator

WILD = Wheel Impact Load Detector

Note "A": Detector @ MP185 to be relocated from existing location at MP186. Relocation is necessary to monitor trains using the Cloggsville Connection and the West Shore Corridor. HBD and DED are required on double track installations.

#### Condition 38(D).

The Applicants shall implement the following actions for those rail line segments that would experience an Acquisition-related increase in traffic within the Greater Cleveland Area and for cities along those segments that do not have executed Negotiated Agreements with the Applicants:

- a) Where practicable, the Applicants shall install continuous welded rail in all new rail construction and or rail replacement programs and implement a program to eliminate existing jointed rail in residential areas affected by noise.
- b) The Applicants shall install rail lubrication systems at curves where doing so would result in effective noise abatement for residential or other sensitive receptors.

- c) The Applicants shall inspect all railroad bridges and overpasses to determine their condition, and take necessary action to ensure the bridges are structurally sound and well maintained.
- d) The Applicants shall establish a community liaison to address local environmental concerns, develop cooperative solutions, and offer periodic public outreach meetings to address community concerns.

Chapter 4, "Summary of Environmental Review," Section 4.19.1, describes the rationale for this condition.

Note: Conditions 1, 4, and 7 also apply to the Greater Cleveland Area.

#### **Cleveland Heights**, Ohio

- **Condition 39(A).** The Applicants shall, with the advice and consent of the City of Cleveland Heights, Ohio, adapt and modify the local component of their required Hazardous Materials Emergency Response Plan to account for the special needs of minority and low-income populations in the vicinity of their rail line segments near Cleveland Heights. The Applicants shall certify compliance with this condition within 6 months of the effective date of the Board's decision.
- **Condition 39(B).** The Applicants shall provide and install, including any necessary computer hardware and training, Operation Respond software at the local emergency response center serving minority and low-income populations in the vicinity of their rail line segments near Cleveland Heights. The Applicants shall certify compliance with this condition within 6 months of the effective date of the Board's decision.
- **Condition 39(C).** As agreed to by the Applicants, the Applicants shall fund participation in a training session at the national training center in Pueblo, Colorado, for a representative of the emergency response provider for the City of Cleveland Heights.

Note: Conditions 1, 4, and 5(A) also apply to the City of Cleveland Heights.

#### East Cleveland, Ohio

#### **Condition 40(A).** CSX shall comply with the terms and conditions of its Negotiated Agreement executed with the City of East Cleveland, Ohio.

Condition 40(B). NS shall comply with the terms and conditions of its Negotiated Agreement executed with the City of East Cleveland, Ohio.

Note: Conditions 1, 4, and 5(A) also apply to the City of East Cleveland.

#### Conneaut, Ohio

**Condition 41.** With the concurrence of the City of Conneaut, Ohio, NS shall provide, install, and maintain a real-time train location monitoring system to improve local emergency response vehicle dispatching. At a minimum, the system shall use appropriate technology to detect trains approaching the city on NS rail line segment N-070 and shall display the train locations at an emergency response center to be specified by the City.

Note: Conditions 1, 4, 5(A), and 6 also apply to the City of Conneaut.

#### Defiance, Ohio

Condition 42(A). CSX shall install warning signs with a flashing hazard light to notify motorists in advance that they are approaching the highway/rail at-grade crossing at U.S. Route 24. These signs shall comply with the Federal Highway Administration's Manual on Uniform Traffic Control Devices and shall be installed with the concurrence of the Ohio Department of Transportation. CSX shall certify to the Board compliance with the condition within 6 months of the effective date of the Board's decision regarding the proposed Conrail Acquisition.

Chapter 5, "Summary of Comments and Responses," Section 5.3.18, describes the rationale for this condition.

- **Condition 42(B).** CSX shall, with the advice and consent of the City of Defiance, Ohio, adapt and modify the local component of their required Hazardous Materials Emergency Response Plan to account for the special needs of minority and low-income populations in the vicinity of their rail line segment(s) near Defiance. CSX shall certify compliance with this condition within 6 months of the effective date of the Board's decision.
- Condition 42(C). CSX shall provide and install, including any necessary computer hardware and training, Operation Respond software at the local emergency response center serving minority and low-income populations in the vicinity of their rail line segment(s) near Defiance. CSX shall certify compliance with this condition within 6 months of the effective date of the Board's decision.

**Condition 42(D).** As agreed to by CSX, CSX shall fund participation in a training session at the national training center in Pueblo, Colorado, for a representative of the emergency response provider for the City of Defiance, Ohio.

Note: Conditions 1, 4(B-D), and 5(A) also apply to the City of Defiance.

#### Euclid, Ohio

- **Condition 43(A).** NS shall, with the advice and consent of the City of Euclid, Ohio, adapt and modify the local component of its required Hazardous Materials Emergency Response Plan to account for the special needs of minority and low-income populations adjacent to or in the immediate vicinity of its rail line segment(s) in Euclid. NS shall certify compliance with this condition within 6 months of the effective date of the Board's decision.
- **Condition 43(B).** NS shall provide and install, including any necessary computer hardware and training, Operation Respond software at the local emergency response center serving minority and low-income populations adjacent to or in the immediate vicinity of its rail line segment(s) in Euclid. NS shall certify compliance with this condition within 6 months of the effective date of the Board's decision.
- **Condition 43(C).** As agreed to by NS, NS shall fund participation in a training session at the national training center in Pueblo, Colorado, for two representatives of the emergency response provider for the City of Euclid.

Note: Conditions 1, 4, and 5(A) also apply to the City of Euclid.

#### Fremont, Ohio

Condition 44. NS shall comply with the terms of its Negotiated Agreement with the City of Fremont, Ohio.

Note: Conditions 1, 4, 5(A), and 11 also apply to the City of Fremont.

#### Fostoria, Ohio

Condition 45(A). With the written concurrence of the City of Fostoria, Ohio, the Applicants shall provide and maintain a state-of-the-art electronic display board, or equivalent technology, at the Fostoria Emergency Response Dispatch Center. This board shall be linked to the Applicants' signal system circuitry and show the location of every train within 5 miles of Fostoria Tower to provide the Center's staff with information regarding train movements to aid their emergency response dispatching.

- **Condition 45(B).** The Applicants shall install and maintain constant warning time circuits at all of their highway/rail at-grade crossings in Fostoria that are currently equipped with active warning devices, and at those crossings where active warning devices would be added as a result of other Board conditions or voluntary actions.
- **Condition 45(C).** With the written concurrence of the City of Fostoria, Ohio, CSX shall install a direct voice hotline between Fostoria's Emergency Response Dispatch Center and the CSX operator controlling train movements in the Fostoria area (Tower F operator). Alternatively, the Applicants, with the written concurrence of the City, shall install and maintain closed circuit television cameras over or near the rail line, along with a corresponding video monitor at the Center. The monitoring will continuously show real-time train traffic conditions on the Applicants' rights-of-way through Fostoria.
- **Condition 45(D).** To the extent practicable, the Applicants shall hold trains in areas to minimize trains blocking major highway/rail at-grade crossings in Fostoria.

Chapter 5, "Summary of Comments and Responses," Section 5.3.18, and Appendix G, "Transportation: Highway/RailAt-grade Crossing Traffic Delay Analysis." describe the rationale for these conditions.

- Condition 45(E). CSX shall, with the advice and consent of the City of Fostoria, Ohio, adapt and modify the local component of its required Hazardous Materials Emergency Response Plan to account for the special needs of minority and low-income populations adjacent to or in the immediate vicinity of its rail line segment(s) in Fostoria. CSX shall certify compliance with this condition within 6 months of the effective date of the Board's decision.
- **Condition 45(F).** CSX shall provide and install, including any necessary computer hardware and training, Operation Respond software at the local emergency response center serving minority and low-income populations adjacent to or in the immediate vicinity of its rail line segment(s) in Fostoria. CSX shall certify compliance with this condition within 6 months of the effective date of the Board's decision.
- **Condition 45(G).** As agreed to by CSX, CSX shall fund participation in a training session at the national training center in Pueblo, Colorado, for a representative of the emergency response provider for the City of Fostoria.

Note: Conditions 1, 4, 5(A), 7, and 8 also apply to the City of Fostoria.

Proposed Conrail Acquisition

Holgate, Ohio

Condition 46(A). CSX shall, with the advice and consent of the Holgate Village, Ohio, adapt and modify the local component of its required Hazardous Materials Emergency Response Plan to account for the special needs of minority and low-income populations adjacent to or in the immediate vicinity of its rail line segment(s) in Holgate. CSX shall certify compliance with this condition within 6 months of the effective date of the Board's decision.

Condition 46(B). CSX shall provide and install, including any necessary computer hardware and training, Operation Respond software at the local emergency response center serving minority and low-income populations adjacent to or in the immediate vicinity of its rail line segment(s) in Holgate. CSX shall certify compliance with this condition within 6 months of the effective date of the Board's decision.

**Condition 46(C).** As agreed to by CSX, CSX shall fund participation in a training session at the national training center in Pueblo, Colorado, for a representative of the emergency response provider for the City of Holgate.

Note: Conditions 1, 4(B-D), and 5(A) also apply to the City of Holgate.

Mentor, Ohio

#### Condition 47.

17. If FRA promulgates new regulations related to local alternatives to train horn sounding within five years of the effective date of the Board's final decision, NS shall inform the City of Mentor, Ohio, of these regulations and assist the community in identifying alternative safety measures to eliminate the need to sound train horns in the city. The Applicants shall also assist the community in seeking and receiving FRA approval for these alternative safety measures.

Note: Conditions 1, 4, and 5(A) also apply to the City of Mentor.

#### New London, Ohio

**Condition 48(A).** To enhance safety, CSX shall interconnect the operation of its warning devices at its highway/rail at-grade crossing of State Route 162 in New London, Ohio, with the device of Wheeling and Lake Erie Railroad at the same location so that the devices on both crossings operate for trains on either rail line. CSX shall certify to the Board compliance with this condition within 6 months of the effective date of the Board's decision regarding the proposed Conrail Acquisition.

Chapter 5, "Summary of Comments and Responses," Section 5.3.18, describes the rationale for this condition.

- Condition 48(B). CSX shall, with the advice and consent of the City New London, Ohio, adapt and modify the local component of its required Hazardous Materials Emergency Response Plan to account for the special needs of minority and low-income populations adjacent to or in the immediate vicinity of its rail line segment(s) in New London. CSX shall certify compliance with this condition within 6 months of the effective date of the Board's decision.
- **Condition 48(C).** CSX shall provide and install, including any necessary computer hardware and training, Operation Respond software at the local emergency response center serving minority and low-income populations adjacent to or in the immediate vicinity of its rail line segment(s) in New London. CSX sha'' certify compliance with this condition within 6 months of the effective date of the Board's decision.
- **Condition 48(D).** As agreed to by CSX, CSX shall fund participation in a training session at the national training center in Pueblo, Colorado, for a representative of the emergency response provider for the City of New London.

Note: Conditions 1, 4(B-D), 5(A), 7, 8 and 11 also apply to the City of New London.

#### Oak Harbor, Ohio

# **Condition 49(A).** NS shall construct, with the written concurrence of Ottawa County, a new highway/rail at-grade crossing at Toussaint-Portage Road, in accordance with the design that NS submitted to SEA, to minimize differences between the elevations of the existing roadway and the rail line. NS shall install conventional gates at this crossing.

Chapter 5, "Summary of Comments and Responses," Section 5.3.18, describes the rationale for these conditions.

Condition 49(B). With the concurrence of the City of Oak Harbor, Ohio, NS shall provide, install, and maintain a real-time train location monitoring system to improve local emergency response vehicle dispatching. At a minimum, the system shall use appropriate technology to detect trains approaching the city on NS rail line segments N-079, N-077, N-294, and N-483 and shall display the train locations at an emergency response center to be specified by the City. Chapter 4, Summary of Environmental Review," Section 4.7 provides a more detailed description of the system and its requirements.

Note: Conditions 1. 4, 5(A), and 7 also apply to the City of Oak Harbor.

#### Oxford Township, Ohio

Condition 50. NS shall upgrade its warning devices from passive to flashing light devices at its highway/rail at-grade crossing of Thomas Road in Oxford Township, Ohio. NS shall certify to the Board compliance with this condition within 6 months of the effective date of the Board's decision regarding the proposed Conrail Acquisition.

Chapter 5, "Summary of Comments and Responses," Section 5.3.18, describes the rationale for this condition.

Note: Conditions 1, 4(A), 4(B), and 5(A) also apply to Oxford Township.

#### Tiffin, Ohio

- Condition 51(A). CSX shall, with the advice and consent of the City of Tiffin, Ohio, adapt and modify the local component of its required Hazardous Materials Emergency Response Plan to account for the special needs of minority and low-income populations adjacent to or in the immediate vicinity of its rail line segment(s) in Tiffin. CSX shall certify compliance with this condition within 6 months of the effective date of the Board's decision.
- Condition 51(B). CSX shall provide and install, including any necessary computer hardware and training, Operation Respond software at the local emergency response center serving minority and low-income populations adjacent to or in the immediate vicinity of its rail line segment(s) in Tiffin. CSX shall certify compliance with this condition within 6 months of the effective date of the Board's decision.
- **Condition 51(C).** As agreed to by CSX, CSX shall fund participation in a training session at the national training center in Pueblo, Colorado, for a representative of the emergency response provider for the City of Tiffin.

Note: Conditions 1, 4(B-D), 5(A), and 7 also apply to the City of Tiffin.

Toledo, Ohio

Condition 52. NS shall comply with the terms of its Negotiated Agreement with the Toledo-Lucas County Port Authority and the Toledo Metropolitan Area Council of Governments.

Note: Conditions 1, 4, 5(A), 6, and 7 also apply to the City of Toledo.

#### Vermilion, Ohio

**Condition 53.** If the new NS rail line connection at Vermilion, Ohio requires a new highway/rail at-grade crossing of Coen Road, NS shall design and construct, with the written concurrence of Erie County, the new crossing to minimize differences between the elevations of the existing roadway and the rail line. This design shall provide drivers with proper sight distances approaching and crossing the rail line segment.

Chapter 5, "Summary of Comments and Responses," Section 5.3.18, describes the rationale for this condition.

Note: Conditions 1, 4(A), 4(B), 5(A), and 16 also apply to the City of Vermilion.

#### Willard, Ohio

- Condition 54(A). CSX shall, with the advice and consent of the City of Willard, Ohio, adapt and modify the local component of its required Hazardous Materials Emergency Response Plan to account for the special needs of minority and low-income populations adjacent to or in the immediate vicinity of its rail line segment(s) in Willard. CSX shall certify compliance with this condition within 6 months of the effective date of the Board's decision.
- Condition 54(B). CSX shall provide and install, including any necessary computer hardware and training, Operation Respond software at the local emergency response center serving minority and low-income populations adjacent to or in the immediate vicinity of its rail line segment(s) in Willard. CSX shall certify compliance with this condition within 6 months of the effective date of the Board's decision.
- **Condition 54(C).** As agreed to by CSX, CSX shall fund participation in a training session at the national training center in Pueblo, Colorado, for a representative of the emergency response provider for the City of Willard.

Note: Conditions 1, 4(B-D), 5(A), and 7 also apply to the City of Willard.

#### Pennsylvania

- Condition 55(A). CSX shall comply with the terms and conditions of its Negotiated Agreement with the Commonwealth of Pennsylvania and the City of Philadelphia.
- Condition 55(B). NS shall comply with the terms and conditions of its Negotiated Agreement with the Commonwealth of Pennsylvania and the City of Philadelphia

Note: Conditions 4(A), 4(B), 5(A), and 6 also apply to the City of Philadelphia.

#### Erie, Pennsylvania

- Condition 56(A). The Applicants shall comply with the terms and conditions of their agreement, as described in their Primary Application filed June 23, 1997, to relocate NS traffic onto new tracks in the CSX right-of-way through Erie, Pennsylvania.
- **Condition 56(B).** NS shall comply with the terms and conditions of its Negotiated Agreement executed with the City of Erie regarding the relocation of NS rail traffic from the 19<sup>th</sup> Street tracks to the CSX corridor.
- Condition 56(C). Prior to the demolition, removal, or other alteration of its 19<sup>th</sup> Street facilities and pending Pennsylvania State Historic Preservation Officer concurrence, NS shall document the two guard shanties and five bridges with black and white photographs, and relocate one guard shanty, eligible for listing on the National Register of Historic Places, to the Lake Shore Railway Historical Museum in Erie, Pennsylvania.

Note: Condition 8 also applies to the City of Erie.

Seneca Nation (located in western New York)

Condition 57(A). NS shall, with the advice and consent of the Seneca Nation, adapt and modify the local component of its required Hazardous Materials Emergency Response Plan to account for the special needs of Native American populations adjacent to or in the immediate vicinity of their rail line segments in the Seneca Nation. As agreed to by NS, NS shall work with the Seneca Nation to provide training in hazardous materials emergency response to appropriate tribal personnel. **Condition 57(B).** NS shall provide and install, including any necessary computer hardware and training, Operation Respond software at the local emergency response center serving Cattaraugus Reservation adjacent to or in the immediate vicinity of their rail line segments in the Seneca Nation.

Chapter 5, "Summary of Comments and Responses," Section 5.3.16, describes the rationale for this condition.

Note: Conditions 1, 4, and 5(A) also apply to the Seneca Nation.

#### 7.2.4 Final Recommended Environmental Conditions for Proposed Constructions and Abandonments

The following recommended environmental conditions apply to the proposed construction and abandonment activities listed below, as appropriate, to reduce or avoid the potential for environmental impacts as a result of the proposed Conrail Acquisition:

State	Location	County	Length (feet)	Site ID
CSX				
Illinois	75th Street, Chicago	Cook	1,640	CC01
Illinois	Exermont	St. Clair	3,590	CC02
Illinois	Lincoln Avenue, Chicago	Cook	840	CC03
New Jersey	Little Ferry*	Bergen	1,080	CC04
Ohio	Collinwood Yard, Cleveland	Cuyahoga	Expand existing rail yard to accommodate intermodal facility.	CR03
NS				
Delaware	Wilmington	New Castle	Renovate Shellpot Bridge	NR01
Illinois	Kankakee	Kankakee	1,000	NC01
Illinois	Tolono	Champaign	1,600	NC03
Indiana	Butler	De Kalb	1,700	NC05
Indiana	Tolleston	Lake	900	NC06
Maryland	Hagerstown	Washington	800	NC07

#### PROPOSED CONSTRUCTION PROJECTS

Proposed Conrail Acquisition

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State	Location	County	Length (feet)	Site ID	
Michigan	Ecorse Junction	Wayne	400	NC08	
New York	Buffalo (Blasdell)	Erie	5,200	NC09	
New York	Buffalo (Gardenville Junction)	Erie	1,700	NC10	
Ohio	Columbus	Franklin	1,400	NC12	
Ohio	Oak Harbor	Ottawa	5,000	NC13	
Ohio	Vermilion	Erie	5,400	NC14	

#### PROPOSED CONSTRUCTION PROJECTS

CSX proposes two separate connections (600 and 480 feet in length) at Little Ferry.

State	Between	And	Length (Miles)	Docket No.	Site ID (Owner)
Illinois	Paris	Danville	29.0	CSX No. AB-167 (Sub-No. 1181X), CR No. AB-55 (Sub-No. 551X)	CA01 (CSX)
Indiana	Dillon Jct.	South Bend	21.5	No. AB-290 (Sub-No. 194X)	NA02 (NS)
Ohio	Toledo	Maumee	7.5	No. AB-290 (Sub-No. 196X)	NA03 (NS)

#### PROPOSED ABANDONMENTS

**Condition 58.** For all proposed Acquisition-related constructions and abandonments, the Applicants shall employ the Best Management Practices presented in Attachment 7-A at the end of this chapter.

**Condition 59.** For all proposed Acquisition-related constructions and abandonments, the Applicants shall comply with the Federal, state, and/or local regulations listed below, which have particular applicability in mitigating potential environmental impacts:

#### Hazardous and Solid Waste Handling

a) The Applicants shall observe all applicable Federal, state, and local regulations regarding the handling and disposal of any waste materials, including hazardous waste, encountered or generated during construction or abandonment-relatedactivities. In the event of a hazardous waste spill resulting from proposed construction or abandonment activities, the Applicants shall implement the appropriate emergercy response procedures and remediation measures required by applicable Federal,

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#### Chapter 7: Recommended Environmental Conditions

state, and local regulations. At the request of the U.S. Fish and Wildlife Service, the Applicants shall immediately notify the Service and the appropriate state departments of natural resources in the event of a reportable hazardous materials release.

- **b**) The Applicants shall transport all hazardous materials generated by any proposed construction or abandonment-related activities in compliance with the U.S. Department of Transportation Hazardous Materials Regulations (49 CFR Parts 171 to 179).
- c) The Applicants shall dispose of all materials that cannot be reused in accordance with applicable Federal, state, and local solid waste management regulations.

#### **Dust Control**

d) The Applicants shall comply with all applicable Federal, state, and local regulations to control and minimize fugitive dust emissions resulting from construction or abandonment-related activities. This may involve the use of such control methods as water spraying, installation of wind barriers, or chemical treatment.

#### Water Resources Protection

e) The Applicants shall obtain all necessary Fe\_ al, state, and local permits for alteration of wetlands, ponds, lakes, streams, or rivers, or if a likelihood exists for construction or abandonment-related activities to cause soil or other materials to wash into these water resources. The Applicants also shall use Best Management Practices (see Attachment 7-A at the end of this chapter) to minimize other potential environmental impacts on w er bodies, wetlands, and navigation.

#### **Stormwater Discharge**

f) The Applicants shall obtain all necessary Federal, state, and local permits for stormwater discharge, including National Pollutant Discharge Elimination System permits, during construction or abandonment-related activities.

#### Use of Herbicides

g) The Applicants shall use only Environmental Protection Agencyapproved herbicides and qualified personnel or contractors for application of right-of-way maintenance herbicides, and shall limit such applications to the extent necessary for rail operations.

#### Seven Separate Connections<sup>4</sup>

SEA recommends the following mitigation measures to address rail operations over three of the Seven Separate Connections:

- Willow Creek, Indiana, Finance Docket No. 33388 (Sub No. 2).
- Greenwich, Ohio, Finance Docket No. 33388 (Sub No. 3).
- Bucyrus, Ohio, Finance Docket No. 33388 (Sub No. 7).
- Condition 60. CSX shall comply with its Negotiated Agreement executed with the Village of Greenwich, Ohio and the Board of Huron County, Ohio Commissioners regarding relocation of the connection construction project in Greenwich.
- Condition 61. CSX shall transport all hazardous materials in compliance with U.S. Department of Transportation Hazardous Materials Regulations (49 CFR Parts 171 to 180). CSX shall provide, upon request, local emergency response organizations or coordinating bodies with copies of all applicable Hazardous Materials Emergency Response Plans, and participate in the training of local emergency staff (upon request) for coordinated responses to potential incidents. In case of a hazardous material incident, CSX shall follow appropriate emergency response procedures contained in its Hazardous Materials Emergency Response Plans.
- Condition 62. If wheel squeal occurs during operation of the connection, CSX shall use rail lubrication to minimize noise levels.

<sup>&</sup>lt;sup>4</sup> Potential environmental impacts of the physical construction of the Seven Separate Connections at issue in STB Finance Docket No. 33388 (Sub Nos. 1 through 7) were addressed in separate Environmental Assessments that SEA prepared prior to and separate from this Final EIS. By a decision issued November 25, 1997, the Board approved, subject to certain environmental conditions, the physical construction of the seven connections totaling approximately 4 miles in the States of Indiana and Ohio. This Final EIS therefore addresses on ly proposed operations over these connections. For further details, see Decision No. 9 dated June 11, 1997, and Decision (in Sub Nos. 1 through 7) dated November 25, 1997, included in Appendix R. Proposed mitigation for the environmental impacts associated with the operations over these seven connections is covered in recommended Conditions 60 through 63.

Condition 63. NS shall retain its interest in and take no steps to alter the historic integrity of sites identified at Bucyrus, Ohio until completion of the Section 106 process of the National Historic Preservation Act.

#### 7.3 RECOMMENDED SAFETY INTEGRATION CONDITIONS

- **Condition 64(A).** The Applicants shall comply with the Safety Integration Plans, which may be modified and updated as necessary to respond to evolving conditions.
- **Condition 64(B).** The Applicants shall participate and fully cooperate with the ongoing regulatory activities associated with the safety integration process, as described in the Memorandum of Understanding agreed to by the Board and FRA with the concurrence of the U.S. Department of Transportation, until FRA affirms to the Board in writing that the integration of the Applicants' systems has been completed safely and satisfactorily.

#### 7.4 RECOMMENDED MONITORING AND ENFORCEMENT

#### **Condition 65.** If there is a material change in the facts or circumstances upon which the Board relied in imposing specific environmental mitigation conditions in this Decision, and upon petition by any party who demonstrates such material changes, the Board may review the continuing applicability of its final mitigation, if warranted.

#### **ATTACHMENT 7-A**

#### Best Management Practices for Recommended Environmental Conditions Nos. 58 and 59

- The Applicants shall restore any adjacent properties disturbed during right-of-way construction or abandonment-related activities to pre-construction or pre-abandonment conditions.
- 2. The Applicants shall encourage regrowth in disturbed areas and stabilize disturbed soils according to standard construction practices or as required by construction permits.
- The Applicants shall use appropriate signs and barricades to control traffic disruptions during construction or abandonment-related activities at or near any highway/rail atgrade crossings.
- 4. The Applicants shall restore roads disturbed during construction or abandonment-related activities to conditions required by state and local jurisdictions.
- 5. The Applicants shall control temporary noise from construction or abandonment-related equipment through the use of work-hour controls, operation and maintenance of muffler systems on machinery, and/or other noise reduction methods.
- 6. If the Applicants find previously unknown archeological remains during construction or abandonment-related activities, they shall immediately cease excavation work in the area and contact the appropriate State Historic Preservation Office for guidance and coordination.
- 7. The Applicants shall use appropriate technologies, such as silt screens and straw bale dikes, to minimize soil erosion, sedimentation, runoff, and surface instability during construction or abandonment-relatedactivities. The Applicants shall disturb the smallest area possible around any streams and tributaries, and shall consult with the appropriate state agent to properly revegetate disturbed areas immediately following construction or abandonment-related activities.
- 8. The Applicants shall ensure that all culverts are clear of debris to avoid potential flooding and stream flow alteration.
- 9. The Applicants shall design and construct proposed construction/abandonmentactivities so as to preserve effective drainage to maintain the quality of adjacent prime farmland.


- The Applicants shall use appropriate techniques to minimize potential environmental impacts on water bodies, wetlands, and navigation, including the following specific measures:
  - a) If necessary, the Applicants shall avoid impacts or losses to wetlands wherever possible. If wetland impacts are unavoidable, the Applicants must demonstrate that there are no practicable alternatives available that would avoid or further minimize impacts to wetlands. The Applicants shall compensate for unavoidable wetland losses at ratios determined by the U.S. Army Corps of Engineers and U.S. Fish and Wildlife Service as to type of wetland affected on a site-by-site basis.
  - b) If necessary, the Applicants shall design and replicate compensatory wetlands to match as closely as possible the specific mix of types, functions, and values of the affected wetlands. The compensatory wetlands shall be established via the process of restoration to the extent feasible, and they shall be located in an area as close as practicable to the affected wetlands.
- 11. The Applicants shall ensure that abandonment-related activities are designed to preserve land forms and drainage patterns that may provide flood protection.
- 12. The Applicants shall ensure that for any construction project, new lighting fixtures installed in new parking and security areas adjacent to residential zoned areas shall be cut off or shielded to avoid effects to residences.
- 13. The Applicants shall compensate for trees removed during project activities. Trees shall be replaced with native saplings, if practicable, at a minimum ratio of 1:1, and replacement shall occur as close as possible to the affected areas.
- 14. The Applicants shall establish a staging area for construction equipment in environmentally nonsensitive areas to control erosion and spills.
- 15. Should project activities affect previously unidentified threatened or endangered species and/or their habitat, the Applicants shall immediately cease project activities and contact the U.S. Fish and Wildlife Service and the appropriate State Department of Natural Resources for guidance and coordination.
- 16. The Applicants shall use established standards for recycling or reuse of construction materials such as ballast and rail ties. When recycling construction materials is not a viable option, the Applicants shall specify disposal methods of materials such as rail ties and potentially contaminated surrounding soils and ballast materials to ensure compliance with applicable solid and hazardous waste regulations.

17. The Applicants shall develop a Construction Noise and Vibration Specification for any proposed construction activities associated with the proposed Conrail Acquisition. The Applicants shall designate a noise control engineer to develop the Specification whose qualifications include at least five years of experience with major construction noise projects, and board certification membership with the Institute of Noise Control Engineering or registration as a Professional Engineer in Mechanical Engineering or Civil Engineering.

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## SURFACE TRANSPORTATION BOARD Finance Docket No. 33388

## CSX Corporation and CSX Transportation, Inc. Norfolk Southern Corporation and Norfolk Southern Railway Company Control and Operating Leases/Agreements Conrail Inc. and Consolidated Rail Corporation

# GUIDE TO THE FINAL ENVIRONMENTAL IMPACT STATEMENT

This Final Environmental Impact Statement (Final EIS) evaluates the potential environmental impacts that could result from the proposed Acquisition of Conrail Inc. and Consolidated Rail Corporation (Conrail) by CSX Corporation and CSX Transportation, Inc. (CSX) and Norfolk Southern Corporation and Norfolk Southern Railway Company (NS). The Surface Transportation Board's (Board) Section of Environmental Analysis (SEA) has prepared this document in accordance with the requirements of the National Environmental Policy Act (NEPA) of 1969, as amended (42 U.S.C. 4321); the Council on Environmental Quality (CEQ) regulations implementing NEPA; the Board's environmental rules (49 CFR Part 1105); and other applicable environmental statutes and regulations.

SEA issued the Draft EIS on December 19, 1997. Subsequently, SEA issued an Errata (January 12, 1998) and a Supplemental Errata (January 21, 1998) to clarify statements and analyses in the Draft EIS. The 45-day public comment period closed February 2, 1998. This Final EIS provides responses to comments, questions, and issues that the public, agencies, and other document reviewers raised. It describes SEA's additional environmental analysis and includes SEA's final environmental mitigation recommendations to the Board.

To assist the reader in the review of this document, each volume contains a Guide to that volume and a Table of Contents for each chapter in that volume. In addition, each individual volume also contains a Guide to the Final EIS, a Glossary of Terms, a List of Acronyms and Abbreviations, and the Table of Contents of the Final EIS. Specifically, the Final EIS document includes the following volumes:

Proposed Conrail Acquisition

### **Executive Summary Volume**

The Executive Summary provides an overview of the proposed Conrail Acquisition, including the potential environmental impacts and the mitigation measures that SEA recommends to address those impacts. In addition, the Executive Summary Volume contains the Letter to Interested Parties that SEA attached to copies of this Final EIS, the Information Sources that SEA used for preparing both the Draft EIS and the Final EIS documents, and the Index of keywords and phrases that appear in this Final EIS.

## Volume 1: Chapters 1, 2, and 3

- Chapter 1, "Introduction and Background," describes the purpose and need for the project, the proposed action, and the alternatives to the proposed action. It also sets forth the jurisdiction of the Board and outlines SEA's environmental review process. In addition, this chapter presents an overview of SEA's agency coordination and the public comment process.
- Chapter 2, "Scope of the Environmental Analysis," identifies the proposed Conrail Acquisition-related activities that SEA analyzed. This chapter includes a table presenting the thresholds SEA used to identify activities for environmental analysis and explains project activities that differ from those set forth in the Draft EIS.
- Chapter 3, "Agency Coordination and Public Outreach," describes SEA's public outreach activities to notify interested parties and environmental justice populations of the potential environmental impacts of the proposed Conrail Acquisition and of the availability of the Draft EIS and the Final EIS. Additionally, the chapter explains SEA's distribution of the Draft EIS and the Final EIS, explains the methods that SEA used to facilitate the public comment process, and describes the agency coordination that SEA performed as part of the environmental review process. Chapter 3 also reviews the historic properties outreach activities that SEA conducted in Ohio.

## Volume 2: Chapter 4

Chapter 4, "Summary of Environmental Review," outlines the additional environmental analysis that SEA conducted for each environmental issue area since preparation of the Draft EIS. Specifically, it explains the methods of analysis, presents the public comments and additional evaluations, identifies the results of the analysis, and reviews SEA's assessment of environmental impacts. In addition, this chapter describes SEA's refinement of the mitigation measures recommended in the Draft EIS, SEA's final recommended mitigation measures, anticipated environmental benefits, and the adverse environmental impacts of the proposed Conrail Acquisition.

## Volume 3: Chapter 5

Chapter 5, "Summary of Comments and Responses," contains summaries of the comments that SEA received on the Draft EIS and SEA's responses to the comments. The chapter provides the following: (a) an overview of the comments, including those

from Federal agencies, the Applicants, and national and regional groups as well as groups and individuals within specific states; (b) general comments on the Draft EIS, including the Application review process, the environmental review process, and the system-wide technical analysis; and (c) comments on state and community issues, organized by state and environmental issue category.

### Volume 4: Chapter 6

 Chapter 6, "Safety Integration Planning," sets forth the purpose and topics of the Safety Integration Plans and presents summaries of comments that reviewing agencies and the public submitted about the Safety Integration Plans. The chapter also includes SEA's analysis and response to those comments and provides SEA's conclusion and recommended conditions regarding the Safety Integration Plans.

### Volume 5: Chapter 7

 Chapter 7, "Recommended Environmental Conditions," describes the final environmental mitigation conditions that SEA recommends to address significant adverse environmental impacts that could result from the proposed Conrail Acquisition.

### Volume 6: Appendices

 These four volumes (6A through 6D) include appendices containing the comments on the Draft EIS and the analysis by the technical disciplines as well as appendices containing public outreach and agency consultation information and documents.

Volume 6A contains the following appendix:

A. Comments Received on the Draft Environmental Impact Statement.

Volume 6B contains the following appendices:

- B. Draft Environmental Impact Statement Correction Letter, Errata, Supplemental Errata and Additional Environmental Information, and Board Notices to Parties of Record.
- C. Settlement Agreements and Negotiated Agreements.
- D. Agency Consultation.
- E. Safety: Highway/Rail At-Grade Crossing Safety Analysis.
- F. Safety: Hazardous Materials Transport Analysis.
- G. Transportation: Highway/Rail At-grade Crossing Traffic Delay Analysis.
- H. Transportation: Roadway Systems Analysis.
- I. Air Quality Analysis.

## Volume 6C contains the following appendices:

- J. Noise Analysis.
- K. Cultural Resources Analysis.
- L. Natural Resources Analysis.
- M. Environmental Justice Analysis.

N. Community Evaluations.

Volume 6D contains the following appendices:

- O. EPA Rules on Locomotive Emissions.
- P. SEA's Best Management Practices for Construction and Abandonment Activities.
- Q. Example Public Outreach Materials.
- R. All Relevant Board Decisions.
- S. Index for the Draft Environmental Impact Statement.
- T. Final Environmental Impact Statement Rail Line Segments.
- U. List of Preparers.

### **Addendum Volume**

The Addendum contains information SEA did not include in the other portions of the Final EIS because of production timing constraints. The Addendum contains SEA's evaluation and additional analyses SEA conducted for train traffic rerouting proposed as mitigation for the Greater Cleveland Area. The Addendum also contains additional analysis of the proposed connection in Alexandria, Indiana (one of the Seven Separate Connections) as well as comments received during an additional comment period and summaries of, and responses to, those comments.

## **GLOSSARY OF TERMS**

### abandonment:

The discontinuance of service on a rail line segment and the salvaging and/or the removal of railroad-related facilities for reuse, sale, and/or disposal.

### Acquisition:

The proposal by CSX, NS, and Conrail to acquire control of Conrail's assets and its basic railroad operations.

### active warning devices:

Traffic control devices that give positive notice to highway users of the approach or presence of a train. These devices may include a flashing red light signal (a device which, when activated, displays red lights flashing alternately), a bell (a device which, when activated, provides an audible warning, usually used with a flashing red light signal), automatic gates (a mechanism added to flashing red light signals to provide an arm that can lower across the lanes of the roadway), and a cantilever (a structure equipped with flashing red light signals and extending over one or more lanes of traffic).

Advanced Civil Speed Enforcement System (ACSES): A supplement to the Automatic Cab Signal (ACS) and Automatic Train Control (ATC) systems currently in place within the Northeast Corridor (NEC), ACSES uses a series of transponders to communicate location and other factors to passing trains whose on-board computers utilize the information to achieve system function. These functions include: (1) civil speed enforcement; (2) temporary speed enforcement, including protection of roadway workers; and (3) enforcement of positive stop at interlocking home signals and Control Points (CPs). adverse environmental impact:

A negative effect, resulting from the implementation of a proposed action, that serves to degrade or diminish an aspect of human or natural resources.

Advisory Council on Historic Preservation (ACHP):

air-brake test:

President and Congress on historic preservation matters and administering the provisions of Section 106 of the National Historic Preservation Act.

An independent Federal agency charged with advising the

A test made prior to train departure, required by Federal Railroad Administration regulations and by railroad rules to ensure that a train's air-brake system is functioning as intended and that certain devices are within prescribed tolerances and physical parameters.

Allied Rail Unions (ARU):

**Applicants:** 

**Application:** 

A group of unions representing railroad employees, including the Brotherhood of Locomotive Engineers, the Brotherhood of Railroad Signalmen, and the Brotherhood of Maintenance-of-Way Employees.

CSX Corporation and CSX Transportation, Inc. (CSX), Norfolk Southern Railway Company and Norfolk Southern Corporation (NS), and Conrail Inc. and Consolidated Rail Corporation (Conrail).

A formal filing with the Surface Transportation Board related to railroad mergers, acquisitions, constructions, or abandonments. Applications may be either Primary Applications or Inconsistent and Responsive (IR) Applications. See Primary Application and Inconsistent and Responsive (IR) Application. Area of Potential Effect(s) (AoPE): The geographic area surrounding a rail activity where an individual (or resource) or group of individuals (or resources) could likely experience adverse environmental effects. For this Final EIS, where applicable, the different technical disciplines determined their own specific definitions of this term for their individual technical disciplines.

attainment area:

An area that EPA has classified as complying with the National Ambient Air Quality Standards specified under the Clean Air Act.

Maximum permitted speed for a specific train at a specific

location, taking into account the prevailing weather conditions (for example, restrictions due to heavy rain, extreme heat or

A series of railroad signals that indicate track occupancy in the

block (length of track of defined limits) ahead and govern the

use of a consecutive set of blocks by a train. These signals include wayside track signals and cab signals (signals displayed in the locomotive cab instead of, or in addition to,

authorized speed:

Automatic Block System (ABS):

wayside track signal displays), or both. This system combines automatic detection of train position with control of signals. Automatic Train Control A system that has components installed on both trains and

cold).

A system that has components installed on both trains and tracks that, when working together, will cause the train brakes to apply automatically if the engineer fails to respond to a condition requiring train speed to be reduced.

Best Management Practice (BMP):

(ATC):

Technique that various parties (for example, the construction industry) use to provide protection from adverse impacts to the environment. The Board may designate these techniques as mitigation measures. block group:

A small population area that the U.S. Census Bureau uses to measure and record demographic characteristics. The population of a block group typically ranges from 600 to 3,000 people and is designed to reflect homogeneous living conditions, economic status, and population characteristics. Block group boundaries follow visible and identifiable features, such as roads, canals, railroads, and above-ground high-tension power lines.

block swapping:

The process of moving groups of cars with a common destination (called "blocks") from one train to another.

**Board**:

bulletins:

The Surface Transportation Board, the licensing agency for the proposed Conrail Acquisition.

Documents addressed to train crews and other operating employees specifying temporary or local operating rules and restrictions.

cab signaling: System that provides signal indications in the locomotive cab instead of, or in addition to, wayside signal displays.

gondola.

carload:

centralized traffic control system:

A signal system that allows for the movement of trains in either direction on designated tracks at the maximum authorized speed, in accordance with the wayside or cab signals or both.

A unit of measure used to describe commodities transported on a railroad typically in a boxcar, tank car, flat car, hopper car, or

census tract:

Small, relatively permanent statistical subdivisions of a county containing between 2,500 and 8,000 persons. The U.S. Bureau of Census designs census tracts to reflect homogeneous living conditions, economic status, and population characteristics.

Clean Air Act (Clean Air Act Amendments): The Clean Air Act of 1970 and the subsequent amendments, including the Clean Air Act Amendments of 1990 (42 U.S.C. 7401-7671g); the primary Federal law that protects the nation's air resources. This act establishes a comprehensive set of standards, planning processes, and requirements to address air pollution problems and reduce emissions from major sources of pollutants.

**Clean Water Act:** 

The Federal Water Pollution Control Act Amendments of 1972 (33 U.S.C. 1251 et seq.;) is the primary Federal law that protects the nation's waters, including lakes, rivers, aquifers, and coastal areas. This act provides a comprehensive framework of standards, technical tools, and financial assistance to address the many causes of pollution and poor water quality, including municipal and industrial wastewater discharges, polluted runoff from urban and rural areas, and habitat destruction. Specifically, the Clean Water Act provides for the following:

- Requires major industries to meet performance standards to ensure pollution control.
- Charges states and tribes with setting specific water quality standards appropriate for their waters and developing pollution control programs to meet them.
- Provides funding to states and communities to help them meet their clean water infrastructure needs.
- Protects valuable wetlands and other aquatic habitats through a permitting process that conducts land development activities and other activities in an environmentally sound manner.

#### coastal zone:

According to the Coastal Zone Management Act of 1972, lands and waters adjacent to the coast that exert an influence on the uses of the sea and its ecology, or whose uses and ecology the sea affects. Coastal Zone Management Act (CZMA): The Coastal Zone Management Act of 1972, as amended ((16 U.S.C. 1451-1464; P.L. 92-583), is also known as "Federal Consistency With Approved State Coastal Management Programs" (15 CFR 930). This Federal act preserves, protects, develops, and, where possible, restores or enhances the resources of the nation's coastal zone for the present and for future generations. The provisions of 15 CFR 930.30 ensure that all Federally conducted or supported activities, including development projects directly affecting the coastal zone, are consistent with approved state coastal management programs as much as possible.

collective bargaining agreement:

An agreement between a union and an employer that defines the scope of work, rates of pay, rules, and working conditions for the union's members.

common corridor:

compensation wetlands (compensatory wetlands): For the purposes of this Final EIS, a railroad line segment that accounted account of the public mass transportation service and passenger and freight train operations by using separate tracks adjacent to each other in the same right-of-way or area.

Wetlands that an agency or entity creates, enhances, or preserves to mitigate for unavoidable impacts on existing wetlands that occur as a result of implementation of the agency's or entities' proposed action. These compensation (or compensatory) wetlands replace, "in kind", wetlands that an agency or entity partially or totally fills or drains during its construction or earth-moving activities.

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA): The Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (42 U.S.C. 9601-9675; P.L. 96-510); the Federal act that provides EPA with the authority to clean up inactive hazardous waste sites and distribute the cleanup costs among the parties who generated and/or handled the hazardous substances at these sites.

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Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS): Federal database containing information on potential hazardous waste sites that states, municipalities, private companies, and private persons have reported to the EPA, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act. This database contains sites that are either proposed for inclusion on, or are currently on, the National Priorities List (NPL) and sites that are in the screening and assessment phase for possible inclusion on the NPL.

condition:

A provision that the Board imposes as part of any decision approving the proposed Conrail Acquisition and that requires action by one or more of the Applicants.

conductor:

The operating employee on a train responsible for safe and efficient train movement in accordance with all railroad operating rules and special instructions.

Conrail Shared Assets Operations:

consist:

See Shared Assets Areas.

The number and type of locomotives and cars included in a train, considering special factors such as the tonnage and the placement of hazardous materials cars and "high-wides" (oversize dimension cars).

constant warning time:

A motion-sensing system with the capability of measuring train speed and providing a relatively uniform warning time by warning signal devices to highway traffic at highway/rail atgrade crossings.

**Control Date:** 

The date on which the merger can become effective, following formal approval of the Board.

guidance for agencies

Environmental Policy Act.

inspector).

Council on Environmental Quality (CEQ):

craft employee:

Term applied to a railroad employee qualified in a specific railroad operating or maintenance activity (for example, locomotive engineer, train dispatcher, signal maintainer, or car

Federal agency responsible for developing regulations and

implementing the

National

crew caller:

Term applied to a railroad employee who is responsible for notifying train crews when and where to report for duty.

Process of notifying train crew members when and where their

next tour-of-duty will start. Labor agreements commonly

crew calling:

critical habitat:

specify that railroads call train crews a minimum of 2 hours before crew members are required to begin their tour-of-duty.

> The specific sites within the geographical area occupied by a threatened or endangered species that include the physical or biological features essential to the conservation of the species. These areas may require special management considerations or protection. These areas include specific sites outside the geographical areas occupied by the species at the time of the listing that are essential for the conservation of the species.

criteria of significance:

The criteria SEA developed specifically for the proposed Conrail Acquisition to determine whether a potential adverse environmental effect is significant and may warrant mitigation.

Transverse wooden, concrete, or steel beam supporting the rails of a railroad track.

cross-tie:

#### cultural resource:

Any prehistoric or historic district, site, building, structure, or object that warrants consideration for inclusion in the National Register of Historic Places. A cultural resource that is listed in or is eligible for listing in the National Register of Historic Places is considered a historic property (or a significant cultural resource). For the purposes of this Final EIS, the term applies to any resource more than 50 years old for which SEA gathered information to evaluate its significance. In addition, this Final EIS addresses potential environmental impacts of the proposed rail line construction and abandonment activities on Native American reservations and sacred sites.

#### cumulative effects:

Day 1:

decibel (dB):

Effects resulting from the incremental impacts of the proposed Conrail Acquisition when added to other past, present, and reasonably foreseeable future actions, regardless of which agency (Federal or non-Federal) or person undertakes such actions, as described in 40 CFR 1508.7. Cumulative effects can result from individually minor but collectively significant actions taking place over a period of time.

In the event that the Board approves the proposed Conrail Acquisition, the date (as the Applicants determine through mutual agreement) when operating responsibility for the acquired railroad is transferred to the Applicants' organizations.

A unit of noise measured on a logarithmic scale that compresses the range of sound pressures audible to the human ear over a range from 0 to 140, where 0 decibels represents sound pressure corresponding to the threshold of human hearing, and 140 decibels corresponds to a sound pressure at which pain occurs. Noise analysts measure sound pressure levels that people hear in decibels, much like other analysts measure linear distances in yards or meters. A-weighted decibel (dBA) refers to a weighting that accounts for the various frequency components in a way that corresponds to human hearing. degradation:

detector car:

To change a habitat, either terrestrial or aquatic, so that it no longer meets the survival needs of a particular species of plant or wildlife. Such change could include reducing the feeding area, modifying the vegetation type, and limiting the available shelter.

One of two types of rail equipment designed to detect imperfections in railroad track structure. Rail detector cars detect internal imperfections within the rail, using ultrasonic techniques. See also *track geometry inspection car*.

dimensional traffic:

A freight shipment requiring special authorization for movement because of height, width, length, or gross weight.

The railroad operating employee responsible for issuing ontrack movement and/or occupancy authority through the use of remotely controlled switches, signals, visual displays, voice control written mandatory directives, and/or all of the above.

dispatcher (train):

dispatcher desk:

dispatching:

disproportionality (test for):

The workstation from which a train dispatcher controls a specific portion of a railroad's network.

The process of real-time planning, supervising, and controlling of train movements.

A comparison test to assess whether potentially high and adverse impacts of an action are predominantly borne or more severe or greater in magnitude in an Environmental Justice (EJ) population than a non-EJ population within the current analysis scale (that is, at the system, state, county, segment, or block group level).

double-stack freight service:

The transport of two intermodal containers stacked on top of each other on one platform of an intermodal rail flat car.

double tracking:	Construction of a second railroad track immediately adjacent to an existing track, to perform railroad activities similar to those occurring on the existing track.
emergent species:	Any type of aquatic plant whose vegetative growth is mostly above the water.
emissions:	Air pollutants that enter the atmosphere.
endangered species:	A species that is in danger of extinction throughout all or a significant portion of its range. Federal and state laws protect these species.
Endangered Species Act (ESA):	The Endangered Species Act of 1973 (16 U.S.C. 1531 et seq.; P.L. 93-205), as amended in 1978, is the primary Federal law protecting endangered and threatened wildlife and plant species. The purpose of the law is to provide for the conservation of habitat for such species.
engineer (railroad):	Employee responsible for operating a railroad locomotive in accordance with train-handling practices, signal indications, operating rules, speed limits, and the technical requirements of the particular locomotive.
Environmental Impact Statement (EIS):	A document that the National Environmental Policy Act requires Federal agencies to prepare for major projects or legislative proposals having the potential to significantly affect the environment. A tool for decision-making, it describes the positive and negative environmental effects of the undertaking, and alternative actions and measures to reduce or eliminate potentially significant environmental impacts.

Environmental Justice (EJ):

For purposes of this document, SEA defines environmental justice as the mission discussed in Executive Order (EO) 12898 "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations" (59 FR 7629, February 11, 1994). This EO directs Federal agencies to identify and address "disproportionately high and adverse human health or environmental effects" of their programs, policies, and activities on minority and low-income populations in the United States. EO 12898 also calls for public notification for environmental justice populations, as well as meaningful public participation of environmental justice populations. In this document, SEA used the guidance provided in the Department of Transportation Order on Environmental Justice, the Council of Environmental Quality, Environmental Justice Guidance under the National Environmental Policy Act, and the Interim Final Guidance for Incorporating Environmental Justice Concerns in EPA's NEPA analysis to analyze potential disproportionately high and adverse impacts on environmental justice populations for rail segments, intermodal facilities, rail yards, and new construction.

Environmental Justice (EJ) population: A population within an Area of Potential Effect whose minority and low-income composition meets at least one of the following criteria: (1) The percentage of minority and lowincome population in the Area of Potential Effect is greater than 50 percent of the total population in the Area of Potential Effect; or (2) The percentage of minority and low-income population in the Area of Potential Effect is at least ten percentage points greater than the percentage of minority or low-income population in the county of which the Area of Potential Effect is a part.

Environmental Resource Category: Any of the environmental issues that serve as the major topics of impact analysis for this EIS. Examples include land use, natural resources, noise, hazardous materials, cultural resources, water quality, or air quality.

Environmental Resource Score (ERS):	The impact score determined for an environmental resource category within a (block group) Area of Potential Effect. A typical ERS ranges from 0 to 6, reflecting the relative impact on the Area of Potential Effect compared with impacts on other Areas of Potential Effect. For the Environmental Justice analysis, SEA calculated an ERS for noise, hazardous materials transport, and traffic safety and delay.
equipment:	For a railroad, a term used to refer to the mobile assets of the railroad, such as locomotives, freight cars, and on-track maintenance machines. Also used more narrowly as a collective term for freight cars operated by the railroad.
equipment restrictions:	Operating instructions that restrict certain types of locomotives or freight cars from operating over selected line segments.
Errata:	A list of corrections to the Draft EIS, prepared to facilitate public review of the Draft EIS and to clarify some of the information contained therein.
Executive Order (EO) 12898:	Executive Order 12898, "Federal Actions to Address Environmental Justice in Minority and Low-Income Populations," issued in February of 1994; directs Federal agencies to identify and address as appropriate "disproportionately high and adverse human health or environmental effects," including interrelated social and economic effects, of their programs, policies, and activities on minority populations and low-income populations in the United States.

extra board crew caller position:

Railroad employee who does not have a regularly assigned position but who works on an on-call basis.

## Glossary of Terms

floodplain:	The lowlands adjoining inland and coastal waters and relatively flat areas and flood-prone areas of offshore islands, including, at a minimum, those areas that have a 1 percent or greater chance of flood in any given year (also known as a 100- year or a Zone A floodplain).
Four City Consortium:	An alliance of the cities of East Chicago, Hammond, Gary, and Whiting, Indiana.
freight car inspections:	Pre-departure tests required for railroad freight cars pursuant to Federal Railroad Administration regulations.
fugitive dust:	According to EPA regulations, those particulate matter emissions that could not "reasonably pass" through a stack, chimney, vent, or other functionally equivalent opening. Examples of fugitive dust include wind-borne particulate matter from earth-moving and material handling during construction activities.
Geographic Information System (GIS):	A computer system for storing, retrieving, manipulating, analyzing, and displaying geographic data. GIS combines mapping and databases.
grade crossing:	See highway/rail at-grade crossing.
grade separation:	See separated grade crossing.
gross ton-mile:	A measure of railroad production that represents the weight of cars and freight movement in terms of total tons per mile transported system-wide or over a specific rail line segment. Specifically, 1 ton of railroad car and loading carried 1 mile.

haulage right(s): The limited right (or combination of limited rights) of one railroad to have their freight traffic moved by another railroad over the designated lines of the other railroad.

hazardous materials:

high-profile crossings:

Substances or materials that the Secretary of Transportation has determined are capable of posing an unreasonable risk to human health, safety, and property when transported in commerce, as designated under 49 CFR Parts 172 and 173.

hazardous wastes: Waste materials that, by their nature, are inherently dangerous to handle or dispose of (for example, old explosives, radioactive materials, some chemicals, some biological wastes). Usually, industrial operations produce these waste materials.

high-and-wide load: Load on a freight car that exceeds the normal height and/or width limits for general operation over a railroad. Such loads may move only with special operating precautions to prevent damage to wayside structures and trains on adjacent tracks.

> A condition at a highway/rail at-grade crossing where the elevation of the tracks is above the elevation of the approaching roadway. This condition, generally the result of the periodic raising of the tracks for maintenance of the track bed, can affect sight distance for highway users and can become a hazard for trucks and trailers with low groundclearance. This is also referred to as "hump crossings".

highway/rail at-grade The general area of an intersection of a public or private road and a railroad where the intersecting rail and highway traffic are at the same level.

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crossing:

### Glossary of Terms

historic property:

Any prehistoric or historic district, site, building, structure, or object included in or eligible for inclusion in the National Register of Historic Places (NRHP). The term "eligible for inclusion in the NRHP" pertains to both properties that the Secretary of the Interior has formally determined to be eligible and to all other properties that meet NRHP listing criteria.

horn noise (train):

hours-of-service regulations:

Implementing Agreement:

Inconsistent and Responsive (IR) application:

Indian tribe:

Noise that occurs when locomotives sound warning horns in the vicinity of highway/rail at-grade crossings.

Federal Hours of Service Law, which Federal Railroad Administration enforces, governing maximum shift lengths and minimum rest periods for railroad operating employees. These employees include train crew, train dispatchers, and signal maintainers, as well as mechanical employees such as hostlers who move equipment for the purpose of test and inspection.

An agreement between a railroad company and an employee union regarding working conditions on a combined system, and specifying the corresponding seniority districts, work locations, and other terms and conditions of employment.

Proposal to the Surface Transportation Board that Parties of Record submitted prior to October 21, 1997, requesting modifications of, or alternatives to, the proposed Conrail Acquisition.

According to Indian Self-Determination and Education Assistance Act (25 U.S.C. 450-458; P.L. 93-638), any Indian tribe, band, nation, or other organized group or community recognized as eligible for the special programs and services that the United States provides to Indians because of their status as Indians. interchange point:

Point at which two or more railroads join to exchange freight traffic.

interlocking:

An arrangement of switch, lock, and signal devices that is located where rail tracks cross, join, or separate. The devices are interconnected in such a way that their movements must succeed each other in a predetermined order, thereby preventing opposing or conflicting movements.

intermodal facility: A site consisting of tracks, lifting equipment, paved and/or unpaved areas, and a control point for the transfer (receiving, loading, unloading, and dispatching) of trailers and containers between rail and highway, or between rail and marine modes of transportation.

jurisdictional wetland:

key route:

key train:

L<sub>dn</sub>:

Wetlands that the U.S. Army Corps of Engineers regulates under Section 404 of the Clean Water Act (33 U.S.C. 1344).

For the purposes of this Final EIS, a rail line segment that carries an annual volume of 10,000 or more carloads of hazardous material.

Any train with five or more tank carloads of chemicals classified as a Poison Inhalation Hazard (PIH), or with a total of 20 rail cars with any combination of PIHs, flammable gases, explosives, or environmentally sensitive chemicals.

The day-night average noise sound level, which is the receptor's cumulative noise exposure from all noise events over a full 24 hours. This is adjusted to account for the perception that noise at night is more bothersome than the same noise during the day.

Leg(h):

The hourly energy-averaged noise level.

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labor relations culture:

Philosophy by which an employer and/or parties to a collective bargaining agreement conduct labor-management relations.

land use consistency:

Determination of whether the proposed Conrail Acquisition represents a change that is consistent with local land use plans in effect, based on consultation with local and/or regional planning agencies and/or a review of the official planning documents that such agencies have prepared.

A measure of the operational efficiency of a roadway vehicle Level of Service (LOS): traffic stream using procedures that consider factors such as vehicle delay, freedom to maneuver, traffic interruptions, comfort and convenience, and safety. Traffic analysts express LOS as letter grades, ranging from Level of Service A (free flowing) to Level of Service F (severely congested); they measure LOS by the average delay for all vehicles. Specifically, Level of Service A describes operations with very low delay (less than 5.0 seconds per vehicle); Level of Service B describes operations with delay in the range of 5.1 to 15.0 seconds per vehicle; Level of Service C describes operations with delay in the range of 15.1 to 25.0 seconds per vehicle; Level of Service D describes operations with delay in the range of 25.1 to 40.0 seconds per vehicle; Level of Service E describes operations with delay in the range of 40.1 to 60.0 seconds per vehicle; and Level of Service F describes operations with delay in excess of 60.0 seconds per vehicle.

low-income population:

maintenance area:

A population composed of persons whose median household income is below the Department of Health and Human Services poverty guidelines.

An area classified by EPA as meeting National Ambient Air Quality Standards (NAAQS) and which previously (within the last 10 years before reclassification) did not meet NAAQS. maintenance-of-way: The activity of maintaining the track and structures of a railroad.

For the purposes of this Final EIS, a rail line segment where the annual volume of hazardous material it carries is projected to double and also exceed 20,000 carloads as a result of the proposed Conrail Acquisition.

Mechanical Department: Department of the railroad primarily responsible for the maintenance and inspection of locomotives, freight cars, and other moving equipment.

Memorandum of Agreement (MOA): With regard to cultural resources for the Final EIS, a legally binding document executed under 36 CFR 800.5(e)(4) that either specifies the process a Federal agency will undertake in order to avoid, reduce, or mitigate adverse effects on historic properties by the implementation of a proposed action, or documents the acceptance of such effects in the public interest. The parties who sign a MOA generally include the lead agency, the State Historic Preservation Office, the Advisory Council on Historic Preservation, and sometimes other interested parties.

Memorandum of Understanding (MOU): An agreement that two or more parties execute that sets forth the specific duties and responsibilities of each party. For the purposes of this Final EIS, MOU is an agreement that the Applicants may negotiate with communities.

minority population:

major key route:

mitigation:

A population composed of persons who are Black (non-Hispanic), Hispanic, Asian American, American Indian, or Alaskan Native.

An action taken to prevent, reduce, or eliminate adverse environmental effects.

#### Glossary of Terms

motive power:

Locomotives operated by the railroad.

multi-level rail car:

A two- or three-level freight car, designed for transporting automotive vehicles.

Multiple Resource Score (MRS): For the Environmental Justice analysis, a measure of aggregate impacts used to identify the geographic areas of greatest concern. This score sums the environmental resource scores for hazardous materials transport, noise, and traffic safety and delay and forms the basis for the tests for disproportionality.

National Ambient Air Quality Standards (NAAQS):

National Environmental Policy Act (NEPA):

National Historic Preservation Act (NHPA): Air pollutant concentration limits established by the EPA for the protection of human health, structures, and the natural environment.

The National Environmental Policy Act of 1969, as amended (42 U.S.C. 4321-4347; P.L. 91-190) is the basic national charter for the protection of the environment. It establishes policy, sets goals, and provides means for carrying out the policy. Its purpose is to provide for the establishment of a Council on Environmental Quality and to instruct Federal agencies on what they must do to comply with the procedures and achieve the goals of NEPA.

The National Historic Preservation Act of 1966, as amended (16 U.S.C. 470-470t *et seq.*; P.L. 89-665), is the basic legislation of the Nation's historic preservation program that established the Advisory Council on Historic Preservation and the Section 106 review process. Section 106 of the NHPA requires every Federal agency to "take into account" the effects of its undertakings on historic properties.

National Priorities List (NPL):	A subset of CERCLIS; EPA's list of the most serious uncontrolled or abandoned hazardous waste sites identified for possible long-term remedial action under the Superfund Program.
National Register of Historic Places (NRHP):	Administered by the National Park Service, the Nation's master inventory of known historic properties, including buildings, structures, sites, objects, and districts that possess historic, architectural, engineering, archaeological, or cultural significance at the Federal, state, and local levels.
Native American:	According to the Native American Graves Protection and Repatriation Act of 1990, as amended (25 U.S.C. 3001 et seq.; P.L. 101-601), of, or relating to, a tribe, people, or culture that is indigenous to the United States.
Native American lands:	According to the regulations of the Advisory Council on Historic Preservation in 36 CFR 800.2, as modified by the scope of this EIS, all lands under the jurisdiction or control of an Indian tribe, including all lands within the exterior boundaries of any American Indian reservation.
Negotiated Agreement:	An agreement between CSX, NS, or both, and one or more communities or other governmental units that addresses potential environmental impacts or other issues.
No-Action Alternative:	The proposed acquisition of Conrail by CSX and NS does not take place under this alternative; also the present setting for the pre-Acquisition conditions.

#### Glossary of Terms

noise:

A disturbance or annoyance of an intruding or unwanted sound. Noise impacts essentially depend on the amount and nature of the intruding sound, the amount of background sound already present before the intruding or unwanted sound occurred, and the nature of working or living activity of the people occupying the area where the sound occurs.

noise contour:

Lines plotted on maps or drawings connecting points of equal sound levels.

noise-sensitive receptor:

Location where noise can interrupt ongoing activities and can result in community annoyance, especially in residential areas. The Board's environmental regulations include schools, libraries, hospitals, residences, retirement communities, and nursing homes as examples of noise-sensitive receptors.

nonattainment area:

An area that EPA has classified as not complying with the National Ambient Air Quality Standards promulgated under the Clean Air Act.

Northeast Corridor (NEC):

Railroad right-of-way between Boston, Massachusetts and Washington, D.C. on which Amtrak and others operate; Amtrak is responsible for operation and maintenance on all of the route, except the route segment between New Haven, Connecticut and New Rochelle, New York.

**Northeast Operating** Rules:

Rules that govern railroad operations, adapted by members of the Northeast Operating Rules Advisory Committee (NORAC). These operating rules apply to all railroads when working on any NORAC member's territory. The NORAC members are Bay Colony Railroad, Conrail Inc. and Consolidated Rail Corporation (Conrail), Delaware & Hudson Railway company, Guildford Transportation Industries, National Railroad Passenger Corporation (Amtrak), New Jersey Transit (NJT), New York Susquehanna & Western Railway Corporation, Providence & Worcester Railroad Company, and Southeastern Pennsylvania Transportation Authority (SEPTA).

notices:

equipment:

Documents addressed to engineers and other operating employees detailing temporary or local operating rules and restrictions.

on-track (maintenance) Track and other maintenance equipment provided with flanged wheels and able to move along railroad track.

operating employee:

Railroad employee engaged in the operation of trains, including a member of the train crew; a train dispatcher; and a track, a signal, and an equipment maintenance employee.

**Operating Plans:** Documents that CSX and NS provided as part of the Application, detailing their planned railroad operations following the proposed Conrail Acquisition.

operating practices: Safety and operating rules, practices, and procedures contained in operating rulebook, timetable, special instructions, or any other company-issued instructions and the management decisions implementing those rules and instructions that govern the movement of trains and work on or around active tracks.

operating rules: Written rules of a railroad governing the operation of trains and the conduct of employees responsible for train operations when working on or around active tracks.

Operation Lifesaver: A non-profit public information and safety education program dedicated to eliminating collisions, deaths, and injuries at highway/rail at-grade crossings and on railroad rights-of-way. It is composed of a broad-based coalition of Federal, state, and local government agencies, private safety groups, and transportation industry representatives.

particulate matter (PM):

Airborne dust or aerosols.

entire POR service list.

Party of Record (POR):

passive warning devices: T

positive train separation:

Traffic control devices that do not give positive notice to highway users of the approach or presence of a train. These devices may include signs and pavement markings, located at, or in advance of, railroad crossings to indicate the presence of a crossing and the presence of a train. These signs are either regulatory or non-regulatory and may include parallel track signs, crossbucks, stop signs, yield signs, and constantly flashing lights.

Party that notified the Board of their active participation in the proceeding about the proposed Conrail Acquisition. When submitting a filing to the Board, the POR must also notify the

a: Mechanism included in positive train control, an experimental, automated safety system, using Global Positioning System (GPS) technology, onboard computers and wayside information inputs to control train movement. In the event of failure on the primary safety system, positive train control reduces the risk of single-point failure (that is, human error). posted speed:

Maximum speed permitted at a specific location on the railroad network irrespective of train type.

Prevention of Significant Deterioration (PSD) Class I Areas:

**Primary Application:** 

National parks and wilderness areas designated under the Clean Air Act as areas for which users are to maintain air quality at pristine levels, with very small increases in air pollution levels allowed.

The formal filing of documents with the Surface Transportation Board by applicants for railroad mergers, acquisitions, constructions, or abandonments. The Primary Application contains Operating Plans and information describing related construction projects. It also includes an Environmental Report, describing the physical and operational changes associated with the proposed action and the potential environmental effects of that action.

prime farmland:

proposed Conrail

Acquisition:

public uses:

According to Natural Resources Conservation Service, land having the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops.

The proposed acquisition of Conrail's physical assets and operating systems by CSX and NS, for which the Applicants are seeking approval from the Board.

According to 49 U.S.C. 10905 and STB Regulations "Surface Transportation Manual," Section 1105.7(3)iv, those identified alternative public purposes for the use of rail properties proposed for abandonment or discontinuance, including highways, other forms of mass transportation, conservation, energy production or transmission, or recreation.

queue:

A line of vehicles waiting at a highway/rail at-grade crossing for an obstruction to clear.

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rail line segment:For the purposes of this Final EIS, portions of rail lines that<br/>extend between two terminals or junction points.rail route:Line of railroad track between two points on a rail system.

A railroad track that typically connects to the main line at only one end and provides rail service to one or more railroad freight customers. A rail spur could also parallel the main line.

rail yard: A location or facility with multiple tracks where rail operators switch and store rail cars.

receptor:

rail spur:

See noise-sensitive receptor.

regional and system gang:

remediation (remedial actions):

Actions taken to mitigate the adverse effects, or potential adverse effects, to the environmental or to the public health and welfare resulting from the release or spill of hazardous substances.

A group of railroad maintenance-of-way employees that work

a particular region or an entire railroad system.

Request for Conditions: A document filed with the Board by a party to this proceeding on or before October 21, 1997, that requests the Board to impose one or more specified requirements on the Applicants as a condition to the Board's approval of the proposed Conrail Acquisition.

Resource Conservation<br/>and Recovery ActThe Resource Conservation and Recovery Act of 1976 (42<br/>U.S.C. 6901 et seq.; P.L. 94-580) is a Federal act governing the<br/>generating, storing, transporting, treating, and disposing of<br/>hazardous waste.

Resource Conservation and Recovery Information System (RCRIS): Federal database containing information on facilities that generate, transport, store, treat, and/or dispose of hazardous waste.

Responsive Environmental Report (RER): A report, submitted by an Inconsistent and Responsive applicant, that contains detailed environmental information regarding the activities proposed in its IR Application and complies with the requirements for environmental reports in the Board's rules at 49 CFR 1105.7(e).

A speed that will permit a train to stop within one-half the range of vision of the railroad employee controlling the movement of the train; the train must stop before passing improperly aligned switches, a defect in the track structure, deliberately placed objects, or striking other railroad equipment. According to Federal Railroad Administration regulations, this speed is not to exceed 20 miles per hour.

restricted speed:

retarder:

In railroad yards, a braking device, usually power-operated, built into a railroad track to reduce the speed of cars by means of brake-shoes which, when set in braking position, press against the sides of the lower portions of the wheels.

The strip of land for which an entity (for example, a railroad) has a property right to build, operate, and maintain a linear structure (for example, a rail line).

roadmaster:

right-of-wav:

Safety Assurance and Compliance Program (SACP): Railroad supervisor responsible for track inspection and maintenance over a specified portion of the railroad network.

Federal Railroad Administration program to audit railroad safety practices and to ensure compliance with Federal regulations.

safety culture:

The manner in which management and employees in an organization view and approach the issue of safety, including both formalized rules and informal practices in the organization.

Safety Implementation Plan Guidelines (SIPG): A series of acquisition-related guidelines that the Federal Railroad Administration developed for CSX and NS, detailing a list of safety concerns that CSX and NS must address in their Safety Integration Plans.

Plans that the Applicants prepared and submitted to the Board

to explain how they propose to provide for the safe integration of their separate corporate cultures and operating systems, if

the Board approves the proposed Conrail Acquisition.

Safety Integration Plans:

Section 106 review process:

The review process set forth in Section 106 of the NHPA (16 U.S.C. 470) that requires every Federal agency to "take into account" the effects of its undertakings on historic properties and affords the ACHP the opportunity to comment on those undertakings and their effects.

seniority district:

A geographic area within which a group of employees in a specific labor union (for example, engineers, dispatchers) are authorized and expected to work.

seniority rights: The priority one employee has over another employee in bidding for available positions, choice of work assignments, and similar matters, based on length of employment in a specified category. Agreements between railroad companies and labor unions specify such rights.

sensitive receptor:

See noise-sensitive receptor.
separated grade crossing:	The site where a local street or highway crosses railroad tracks at a different level or elevation, either as an overpass or as an underpass.
service:	The official notification and delivery of Board decisions and notices (including EAs and EISs) by the Secretary of the Board to persons involved in a particular proceeding.
Settlement Agreement:	An agreement negotiated between CSX or NS or both and one or more parties, including other railroads, that addresses concerns or requests of the party (or parties). Generally, such an agreement addresses competitive customer service or labor issues.
Seven Separate Connections:	Seven new rail line connection construction projects in Illinois, Indiana, and Ohio. These projects total approximately 4 miles of new track. CSX and NS requested that the Board give early consideration and approval to the physical construction of these particular connections.
Shared Assets Areas:	Areas comprising Conrail facilities in southeastern Michigan, northern New Jersey, and southern New Jersey/Philadelphia that CSX and NS would share and Conrail Shared Assets Operations would operate for the benefit of both CSX and NS, if the Board approves the proposed Conrail Acquisition.
shifted load:	An improperly secured freight car load that has moved and may protrude beyond the allowed dimensional limits.
shipment:	A unit of freight given to the railroad for movement to its destination by an individual customer.

siding:

A track parallel to a main track that is connected to the main track at each end. A siding is used for the passing and/or storage of trains.

signal maintainer:

socioeconomic:

Railroad employee who maintains signal and communications systems.

For this Final EIS, job loss directly attributable to changes in the physical environment as a result of construction and abandonment activities and other activities related to the proposed Conrail Acquisition project.

Sound Exposure Level (SEL):

For a transient noise event such as a passing train, equivalent to the maximum A-weighted sound level that would occur if all of the noise energy associated with the event were restricted to a time period of 1 second. The SEL accounts for both the magnitude and the duration of the noise event; noise analysts use SEL to calculate the day-night average noise level.

Spill Prevention, Control, and Countermeasures Plan (SPCCP): A site-specific document written to detail measures to prevent discharges of oil into waters of the United States (as defined in the Clean Water Act). Facilities with aboveground storage capacities in a single container greater than 660 gallons, or the aggregate aboveground storage capacity greater than 1,320 gallons, or total underground storage capacity greater than 42,000 gallons are required to prepare SPCCPs.

superior train:

For purposes of this Final EIS, a passenger train operating on the same track network with freight trains. Superior trains must have track clear of all trains not less than 15 minutes prior to their arrival. See *temporal train separation*. collisions. See superior train.

Supplemental Environmental Report: A report that analyzes the environmental impacts of operating charges related to a Settlement Agreement between an Applicant and another railroad that exceed the Board's thresholds when added to changes proposed in the Applicants' Operating Plans.

switch:

The portion of the track structure used to direct cars and locomotives from one track to another.

switching:

The activity of moving cars from one track to another in a yard or where tracks go into a railroad customer's facility.

The time separation of passenger trains that share rail lines

with freight trains, in order to reduce the possibility of train

temporal train separation:

territory:

The portion of a railroad's track network under the management of a particular supervisor.

threatened species:

A species that is likely to become endangered within the foreseeable future throughout all or part of its range. Federal and state laws protect these species.

threshold for environmental analysis: A level of proposed change in railroad activities that determines the need for SEA's environmental review. For the proposed Conrail Acquisition, SEA used the Board's environmental rules at 49 CFR Part 1105 to determine the activities that it would examine for air and noise impacts ("Board thresholds"). For other issue areas, SEA developed appropriate thresholds to guide its environmental review ("SEA thresholds"). The term "Board thresholds", as used in this EIS, may refer to either Board or SEA thresholds.

#### Glossary of Terms

timetable:

A document that identifies key railroad line features over a defined portion of the network. The features usually include distances, speed limits, track layout, type of signaling, location and length of passing sidings, and the local applicability of specific operating rules. Operating rules are often published with the timetable.

track geometry:

Dimensional description of railroad track and individual rails compared to optimal design criteria.

track geometry inspection car:

trackage right(s):

trackage rights agreement:

traffic volume (highway):

traffic volume (rail):

Rail vehicle equipped with instruments to make continuous, inmotion measurements of variations in the track gauge, alignment, and cross level.

The right (or combination of rights) of one railroad to operate over the designated trackage of another railroad including, in some cases, the right to operate trains over the designated trackage; the right to interchange with all carriers at all junctions, the right to build connections or additional tracks to access other shipper or carriers. See also *haulage right(s)*.

An agreement between two parties that defines the trackage rights granted to one party over the tracks of a second party.

The number of highway vehicles that pass over a given point during a given period of time, often expressed on an annual, daily, hourly, and sub-hourly basis. For the purposes of this Final EIS, SEA expressed highway traffic volumes on a daily basis.

The total volume of rail traffic that passes over a given rail line segment, typically expressed in either trains per day or annual million gross tons per year.

A conveyance transported by one or more locomotives train (freight): typically with 40 to 150 freight cars, measuring approximately 5,000 to 8,000 feet in length. For the purposes of this Final EIS, does not apply to locals, work trains, switch-engine movements, or engine-only movements. Equipment composed of one or more rail cars designed to carry train (passenger): passengers, propelled by a locomotive or self-propelled, moving from one place to anoth.r. Employees assigned to operate a train, usually an engineer, a train crew: conductor, and one or more trainmen. An electronic device located alongside a rail track that train defect detector: monitors passing trains to determine the presence of certain potentially dangerous conditions, such as an overheated wheel bearing ("hot box") or a shifted load that protrudes from the rail car. Member of a train crew responsible for assisting the engineer trainman: and conductor in operating the train, especially with switching cars. Railroad operations supervisor responsible for managing train trainmaster: and vard operations and operating employees on a defined portion of the railroad network. An intermittent occurrence of noise, such as the passing of a transient noise event: train that generates such noise. Department of the railroad responsible for day-to-day train Transportation operations and dispatching. **Department:** 

to vibration.

Triple Crown Service (TCS):

An expedited intermodal service offered by both Conrail and NS. TCS trains do not require the use of flat cars, but rather use specially designed dual-mode highway trailers that are coupled together with two-axle rail wheel sets that support the ends of the trailers for the rail portion of the rail-highway movement. The equipment used is similar to "RoadRailer" equipment.

turnout:

The portion of railroad track structure where a single track divides into two tracks.

A party's sworn statement that provides information to the Board.

vibration velocity:

Verified Statement:

waybill:

wayside:

Document or computer record containing details of a rail shipment: origin, destination, route, commodity, freight rate, car or cars used, and similar information.

The rate of change of displacement of a vibration. Noise

analysts often express measurements of vibration in terms of velocity because velocity correlates well with human response

Adjacent to the railroad track, as in "wayside signals" or "wayside defect detectors."

wayside noise:

Train noise adjacent to the right-of-way that comes from sources other than the horn, such as engine noise, exhaust noise, and noise from steel train wheels rolling on steel rails. wetlands:

According to 40 CFR Part 230.41, those "areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions," generally including swamps, marshes, bogs, and similar areas.

yardmaster:

Railroad operations supervisor responsible for railroad operations and employees in a railyard.

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# LIST OF ACRONYMS AND ABBREVIATIONS

AAR	Association of American Railroads
ABS	Automatic Block System
ACHP	Advisory Council on Historic Preservation
ACS	Automatic Cab Signals
ACSES	Advanced Civil Speed Enforcement System
ADT	Average Daily Traffic
Amtrak	The National Railroad Passenger Corporation
ANSI	American National Standards Institute
AoPE	Area of Potential Effect(s)
APL	American Presidents Line
APTA	American Public Transit Association
ARU	Allied Rail Unions
ASTM	American Society for Testing and Materials
ATC	Automatic Train Control
B&O	Baltimore & Ohio Railroad Company
<b>B&amp;OCT</b>	Baltimore & Ohio Chicago Terminal Railroad Company
BIA	Bureau of Indian Affairs
BMP	Best Management Practice
Board	Surface Transportation Board
BOCT	Baltimore & Ohio Chicago Terminal Railroad Company
BRL	The Cities of Bay Village, Rocky River, and Lakewood, Ohio
CAA	Clean Air Act of 1970
CAAA	Clean Air Act Amendments of 1990
CEQ	Council on Environmental Quality
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act of 1980
CERCLIS	Comprehensive Environmental Response, Compensation, and Liability Information System
CFR	Code of Federal Regulations
со	carbon monoxide
Conrail	Conrail, Inc. and Consolidated Rail Corporation
СР	Control Point
CPR	Canadian Pacific Railway
CRC	Comments and Requests for Conditions
CSX	CSX Corporation and CSX Transportation, Inc.

СТС	Centralized Traffic Control
CZM	Coastal Zone Management
CZMA	Coastal Zone Management Act of 1972
dB	decibel
dBA	A-weighted decibels
DES	Division of Endangered Species
DOI	U.S. Department of the Interior
DOT	U.S. Department of Transportation
EA	Environmental Assessment
EDR	Environmental Da.a Resources, Inc.
EIS	Environmental Impact Statement
EJ	Environmental Justice
EO	Executive Order
EPA	U.S. Environmental Protection Agency
ERS	Environmental Resource Score
ESA	Endangered Species Act of 1973
FAA	Federal Aviation Administration
FEMA	Federal Emergency Management Agency
FHWA	Federal Highway Administration
FIRM	Flood Insurance Rate Map
FMEA	Failure Mode and Effects Analysis
FRA	Federal Railroad Administration
FRA ID	Federal Railroad Administration Identification Number
FTA	Federal Transit Administration
GIS	Geographic Information System
GPS	Global Positioning System
HABS	Historic American Buildings Survey
HAER	Historic American Engineering Record
HCM	The Transportation Research Board's Highway Capacity Manual
HMERP	Hazardous Materials Emergency Response Plan
HMIS	Hazardous Materials Information System
HUD	Department of Housing and Urban Development
ICC	Interstate Commerce Commission
ID	Identification
IHB	Indiana Harbor Belt Railroad Company
IR	Inconsistent and Responsive [application]
ISTEA	Intermodal Surface Transportation Efficiency Act
IT	Information Technology
LAL	Livonia, Avon, and Lakeville Railroad Corporation
Lda	day-night equivalent sound level
L <sub>eq(h)</sub>	hourly energy-averaged sound level
LOS	Level of Service
LUST	Leaking Underground Storage Tank

MARC	Maryland Rail Commuter (Maryland's Mass Transit Administration's Commuter Rail Service)
MBTA	Massachusetts Bay Transportation Authority
Metra	Northeast Illinois Regional Commuter Railroad Corporation
min./veh	minutes per vehicle
MNR	Metro-North Railroad (Metro-North Commuter Railroad Company)
MOA	Memorandum of Agreement
MOU	Memorandum of Understanding
mph	miles per hour
MRS	Multiple Resource Score
MRTA	Metro Regional Transit Authority of Akron, Ohio
MUTC	Manual of Uniform Traffic Control Devices
N/A	Not Applicable
NAAOS	National Ambient Air Quality Standards
NEC	Northeast Corridor
NEPA	National Environmental Policy Act of 1969
NFIP	National Flood Insurance Program
NHPA	National Historic Preservation Act of 1966
NHTSA	National Highway Traffic Safety Administration
NJT	New Jersey Transit
NORAC	Northeast Operating Rules Advisory Committee
NO,	nitrogen oxide
NPDES	National Pollutant Discharge Elimination System
NPL	National Priorities List
NPS	National Park Service
NRC	Nuclear Regulatory Commission
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
NS	Norfolk Southern Railway Company and Norfolk Southern Corporation
NWI	National Wetlands Inventory
NYCH	New York Cross Harbor
0,	ozone
OAR	Office of Air and Radiation (within Environmental Protection Agency)
OHPO	Ohio Historic Preservation Office
OMS	Office of Mobile Sources (within Environmental Protection Agency)
OTR	Ozone Transport Region
PCB	polychlorinated biphenyl
PDEA	Preliminary Draft Environmental Assessment
PIH	Poison Inhalation Hazard
P.L.	Public Law
PM	particulate matter
PM <sub>10</sub>	particulate matter less than 10 microns in diameter
POR	Party of Record

PSD	Prevention of Significant Deterioration
P&W	Providence & Worcester
OA/OC	Quality Assurance/Quality Control
RCRA	Resource Conservation and Recovery Act of 1976
RCRIS	Resource Conservation and Recovery Information System
RER	Responsive Environmental Report
RO	Reportable Quantity
SACP	Safety Assurance and Compliance Program
SARA	Superfund Amendments and Reauthorization Act of 1986
SCS	Soil Conservation Service
SEA	Section of Environmental Analysis
sec/veh	seconds per vehicle
SEL	Sound Exposure Level
SEPTA	Southeastern Pennsylvania Transportation Authority
SHPO	State Historic Preservation Office
SIPG	Safety Implementation Plan Guidelines
SPCCP	Spill Prevention, Control, and Countermeasures Plan
Stat.	Statute
STB	Surface Transportation Board
SO <sub>2</sub>	sulfur dioxide
TCS	Triple Crown Service
TLCPA	Toledo-Lucas County Port Authority
TMACOG	Toledo Metropolitan Area Council of Governments
Tri-Rail	Florida Tri-County Commuter Rail Authority
USACE	U.S. Army Corps of Engineers
U.S.C.	United States Code
USCG	U.S. Coast Guard
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
VRE	Virginia Railway Express
WMATA	Washington Metropolitan Area Transit Authority

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