



**U.S. Department of Transportation
Federal Railroad Administration**

SAFETY ASSURANCE AND COMPLIANCE PROGRAM (SACP)

Year-2003 Accomplishments

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Federal Railroad Administration

Safety Assurance and Compliance Program

I. Executive Summary

Background

The Federal Railroad Administration (FRA) is the arm of the Federal Government charged with promoting the safety of the Nation's freight and passenger railroads. FRA accomplishes this by promulgating and enforcing regulations and by strategically monitoring numerous components of the rail transportation system. FRA's headquarters and field staff enforce railroad industry compliance with safety regulations and statutes through periodic inspections, audits, and broad or targeted assessments of railroad operations. Doing so requires cooperative efforts among and between FRA, railroads, States, localities, railroad labor, industry organizations, contractors, manufacturers, suppliers, other Federal agencies, and the public at-large.

Federal railroad safety regulations govern track, wayside signal and train control systems, highway-rail grade crossing automatic warning device systems, mechanical equipment (i.e., rolling stock), railroad operating practices, and the transport of hazardous materials. By law, railroads are required to report a wide array of accidents, incidents, and events that occur in the course of operations. FRA also investigates and analyzes certain railroad accidents, and manages State involvement in rail safety oversight. When combined with additional intelligence, the information and data that FRA collects enables the agency to effectively allocate and deploy inspection and oversight resources where they have the greatest positive impacts.

FRA's primary focus and main mission is rail safety, in particular achieving the highest safety results possible. Such results are measured in many ways, including the level or extent of compliance with safety laws by the regulated industry and the frequency of accidents and injuries. FRA places particular emphasis on the quality and effectiveness of safety compliance efforts, not merely on punitive enforcement actions that may not tangibly affect safety improvements, when and where needed. Day-to-day inspection of track and equipment is primarily the responsibility of railroad company personnel. FRA inspectors systematically observe, monitor, examine, and test broadly representative samples or cross sections of the railroad system.

In order to ensure compliance with Federal safety standards, FRA employs a variety of enforcement tools. The most stringent of these is the authority to issue emergency orders where an unsafe condition, an unsafe practice, or both create an emergency situation. FRA also has the authority to issue compliance orders, special notices for repair, and disqualification orders. Where necessary, FRA may seek injunctions. Where inspectors observe (and carefully document) serious or egregious violations of the railroad safety laws, FRA may assess a civil penalty against a railroad, shipper, or individual for the violation, as warranted.

Of the many tools FRA uses to ensure rail safety, the *Safety Assurance and Compliance Program (SACP)* is one of the most important and effective. FRA established this program to

facilitate permanent solutions to safety issues by employing the following: using the expertise of various parties associated with each of the major railroads to find the root causes of safety problems; developing solutions cooperatively with railroad management and employees; and focusing both inspection activity and the use of enforcement tools on the most serious safety risks revealed by FRA inspections and FRA accident data.

The first SACP Report (Year 2002) was prepared in response to a request from Congress. This year's report builds on that initial effort.

Current State of Railroad Safety

By nearly every indicator, long-term safety trends on the Nation's railroads appear very positive. Overall, the safety performance record of the nation's railroads has been one of continuous improvement. Preliminary data for 2003 reveal the safest year on record. Since year 2000,

- Total rail-related accidents and incidents fell 18 percent—a historical low.
- The accident/incident rate (total accidents and incidents per million train-miles) declined 21 percent.
- Railroad employee casualties decreased 29 percent, with the number of employee fatalities at its lowest level ever—19, excluding deaths due to natural causes.
- The employee-casualty rate (fatalities and injuries per million work-hours) fell 22 percent.
- Total rail-related fatalities and injuries dropped 23 percent, with total fatalities at an all-time low—856.
- Highway-rail grade crossing collisions declined almost 17 percent, and overall train accidents fell five percent.

Between 1978 and 2003:

- The number of train accidents dropped a staggering 73 percent, from 10,991 to 2,938.
- The train-accidents rate fell from 14.62 accidents per million train-miles operated to 3.92 accidents per million train-miles operated.
- Total accidents and incidents declined 85 percent, from 90,653 in 1978 to 13,919 in 2003.

Similarly, the grade-crossing safety picture has shown considerable progress, due to a variety of reasons, including public investments in crossing-warning devices and greater awareness of the risks at crossings by highway users. Much of the success is the result of joint efforts by railroad managers and employees, FRA, the States, FRA's Department of Transportation partners (the Federal Highway Administration, the Federal Transit Administration, the Federal Motor Carrier Safety Administration, and the National Highway Traffic Safety Administration), and Operation Lifesaver, Inc.

- In 1990, 698 persons died in highway-rail grade-crossing collisions. In 2003, the number of deaths from highway-rail grade-crossing collisions fell to 324, despite significant increases in both highway and rail traffic.

In recent years, rail trespasser deaths have replaced grade-crossing fatalities as the primary cause of deaths associated with railroading. For the year 2003, 501 individuals -- out of 856 total fatalities -- died while trespassing on railroad property.

FRA's Safety Program

The Office of Safety is the central organizational component of FRA. In addition to setting safety standards and monitoring compliance, its principal program focuses attention on emerging safety issues, and sets the agenda for safety efforts affecting the entire railroad industry.

Of course, the program's most important element is its people. The Office of Safety headquarters staff of 105 employees works on a broad range of activities, including rulemaking, compliance, data analysis, and program management. The agency field force of approximately 510 employees -- comprising safety inspectors, support staff, and managers -- works on inspection and compliance activities, investigations, and public outreach to communities on safety issues.

The rapid growth of new railroads and the pronounced expansion of rail traffic in recent years have placed increased demands on FRA concerning its monitoring of railroad-industry compliance with safety regulations. As a result, the efficient use of the limited resources is critical. In its eight regional offices throughout the nation, FRA directs more than 415 Federal safety inspectors. FRA maximizes its inspection activities by teaming with approximately 160 State safety inspectors (from 30 States), who work in close coordination with agency field forces. Together, these inspectors oversee more than 670 railroads, with more than 220,000 employees; 265,000 miles of track, with 250,000 highway-rail grade crossings; 100,000 railroad bridges; 1,300,000 freight cars; 20,000 freight locomotives; and 8,880 passenger locomotives, coaches, and self-powered coaches.

Promoting Compliance and Safety Improvements

FRA seeks the highest standard of safety in rail operations, and starts with the premise that railroads and their employees want to operate safely for their own benefit and that of their customers, not because a law or regulation requires it. FRA realizes that the Code of Federal Regulations is not the complete font of wisdom on safe practices. In fact, there most likely are safety problems not covered by existing rules that require attention and, possibly, solutions. Thus, the railroads have the responsibility for complying with the standards FRA sets, as well as addressing additional issues that may pose threats to safety. To do so, the railroads undertake their own inspections and tests to ensure that their operations meet both their own and Federal standards.

More than 670 railroads nationwide operate at least 1.3 million pieces of equipment over 265,000 miles of track. Because FRA's inspection force cannot possibly observe all railroad activity, the agency monitors railroads to determine their level of compliance with Federal standards, and employs a variety of tools to bring about full compliance. FRA's principal approach employs a policy of focused inspections and enforcement. That is, FRA seeks to

concentrate its efforts on detecting conditions that are the leading causes of accidents, injuries, and hazardous-materials releases. Where FRA inspectors observe serious non-compliance, they focus their attention on root causes that present the greatest potential to result in accidents or incidents.

The agency objective is to ensure that railroads address critical safety issues by developing plans for remedial action, and that they implement these plans in a timely way. Where routine inspections reveal minor defects that pose little risk, FRA addresses the non-compliance with lower level railroad officials to bring about corrective action, absent formal enforcement proceedings. Where agency inspectors discover more serious safety problems, FRA raises them with higher-ranking railroad officials, providing them the opportunity to address matters that might not have come to their attention and to correct them within a specified timeframe. FRA understands that many railroads are extremely large operations and, while they may be committed to the highest level of safety, their top officials may not be aware of serious local problems. Additionally, this process provides a signal opportunity for the Federal Government to assist in achieving sustainable or permanent solutions, rather than simply citing violations on a sporadic basis. When necessary, however, FRA will not hesitate to use more stringent enforcement tools. This is especially important in situations where FRA identifies safety hazards that pose an immediate and unacceptable risk or hazard that a railroad should have found and corrected on its own.

Where aggressive enforcement is called for, FRA seeks to use an appropriate enforcement mechanism commensurate to the circumstances at hand. Civil penalties are most frequently used. For example, FRA settled more than \$11 million in penalties with railroads and hazardous-materials shippers in CY 2003. Based on the recommendations of field inspectors and working closely with the Office of Safety, FRA's Office of Chief Counsel assesses and collects these penalties. As required by statute, FRA settles such cases through negotiations with railroads and shippers. The settlement negotiations provide a forum for addressing the most immediate and serious compliance issues that have not been resolved through cooperative methods.

FRA employs other enforcement tools as well. Agency inspectors can issue special notices removing locomotives or freight cars from service until repairs are completed or, if deemed necessary, can lower maximum allowable operating speeds over a portion of track until the segment meets Federal standards. FRA sometimes enters into compliance agreements with railroads under which the railroad promises specific remedial actions. Under these agreements, should the railroad fail to deliver on its promise, it agrees to the imposition of a compliance order, emergency order, and/or specific fines. The Federal Railroad Administrator can address any imminent safety hazard by issuing an emergency order, with opportunity for review of the order after its issuance. Civil penalties are available against individuals who willfully violate the safety regulations, and FRA can disqualify such individuals from safety-sensitive service, if a violation of safety regulations demonstrates that individual's unfitness for such service. Moreover, criminal penalties apply for certain willful violations of the hazardous-materials and record keeping or reporting requirements.

This report describes the agency SACP efforts for Class I railroads during 2003. It details instances of safety problems and how the agency, in cooperation with railroad management and labor, has achieved solutions. It illustrates how both inspection activity and the selective use of enforcement tools help successfully address the most serious safety risks. While the SACP approach may take longer in some instances, it is extremely beneficial in those situations where systematic problems exist which require the sustained attention of rail labor and management.

On each of the major railroads, SACP teams include a project manager, FRA inspectors and managers, railroad officials, and employee representatives. The project manager directs all of the SACP efforts. Together with the appropriate Regional Administrator, the project manager assembles teams for each safety discipline issue. The SACP teams provide a forum for resolving both new and emerging compliance issues and recurring safety problems. Issues are often resolved through informal agreements. In other cases, the parties consent to the implementation of formal action plans. At the same time, FRA continues its normal review of railroad activities through regular inspections of facilities, vehicles, operations, and records while also investigating complaints.

II. Class I Railroads (Year 2003 SACP Improvements and Other Safety Activities)

1. Burlington Northern Santa Fe Railroad (BNSF)

Overview

Relying on its strategic safety plan as the overriding guidance document, the Burlington Northern Santa Fe (BNSF) System SACP Team continued its work addressing and resolving regulatory and non-regulatory safety issues for BNSF management, FRA, and a variety of labor organizations representing BNSF employees. During 2003, the SACP team used a partnership approach to systematically address 81 new and 33 prior-year safety and regulatory issues important to engineering, mechanical, and transportation department employees. Of these safety issues, 23 were successfully resolved, and 17 are being monitored for long-term progress. FRA and the SACP team will continue working to resolve the remainder and to address new issues as they arise.

During 2003, site safety committees were formed and expanded under SACP to capitalize on system-safety participation agreements for operating craft employees whose representatives assume a leadership role in local or site-safety committees. Site-safety committees function at the local level under the thirteen already established Division SACP partnerships; more than 100 site-safety committees had been established by the end of the year. These committees address and resolve local safety issues that did not rise to the level of systemic concern, but contributed significantly to safety improvements in the railroad's operations. By means of an issue-escalation process, as well as by monitoring Division and site-safety committee initiatives, the System SACP Task Force utilized Division SACP teams and Site-Safety Committees as information resources.

SACP Improvements and Other Safety Activities

- *Safety Performance Goal.* The railroad's Safety Performance Goal for 2003 was a 15 percent reduction in the frequency ratio of employee injuries. Train, yard, and engine-employee performance improvement was a major contributor in exceeding this goal in 2003, with the year's end seeing a 16 percent frequency rate reduction in total employee injuries. For 2004, the railroad committed itself to achieving another 15 percent reduction in its frequency rate for employee injuries. Crew van accidents and injuries were as problem areas during 2003, and are a focus for safety improvement in 2004.
- *Human Factors Rail Equipment Accident/Incidents.* Human factors (HF)-caused accidents was the prime focus of the BNSF's "Closed Loop Safety Process" campaign and the continuation of Switching Operations Fatality Analysis (SOFA) initiatives (BNSF's Seven Deadly Decisions program). For 2003, human-factors-caused rail equipment accidents reflected a frequency rate of 1.28 per 100,000 man-hours, a slight increase from the 2002 rate of 1.13 per 100,000 man-hours. During 2004, the railroad has planned renewed efforts to address HF-caused accidents. FRA's Operating Practices (OP) discipline is contributing to initiatives to improve performance in this area through its "Focused Inspections" program and through SOFA initiatives with the operating crafts. BNSF's goal for 2004 is a 15 percent reduction in human-factors-caused rail equipment accidents.
- *Grade Crossing Safety and Trespass Prevention.* In the four years since implementing this specific SACP program, BNSF has reduced the number of collisions, injuries, and fatalities at public crossings by 12 percent, 11 percent, and 14 percent, respectively. Between 2002 and 2003, BNSF reported a 25 percent reduction in crewmember injuries resulting from highway-rail crossing collisions, as well as a 31 percent decrease in casualties to highway users.
- BNSF invests more than \$50 million per year in grade-crossing closures, grade-crossing safety initiatives, and trespass-abatement programs. As a result, the frequency ratio of highway-rail grade-crossing accidents per million train-miles has decreased from 3.39 in 2000, 2.92 in 2001, and 2.83 in 2002 to 2.32 in 2003.
- BNSF successfully closed 425 more grade crossings in 2003, exceeding its goal of 420 crossing closures for the year. Since the inception of the crossing closure program in 2000, BNSF has closed 2,000 private (70%) and public (30%) highway-rail grade crossings through the end of 2003. The 2004 crossing closure goal is 420 more crossings system-wide.
- Highway-rail grade crossing collisions decreased from 540 in 2000 to 411 in 2003, a 24 percent reduction. BNSF achieved a 12 percent reduction in crossing collisions for 2003, and has set a goal to reduce collisions by eight percent in 2004.
- BNSF's "Zero Tolerance for Trespassers" program continues to contribute significant safety results to the railroad's overall safety performance. For 2003, BNSF trespasser fatalities and injuries decreased by 10 percent over 2002's performance. In 2003, the railroad introduced a

new railroad-employee security threat-reporting program called “On Guard,” which now encompasses the employee trespasser-reporting program initiated in 2002. In 2003, additional efforts included focused outreach to local law enforcement officials, as well as efforts promoting and publicizing heightened enforcement activities.

- *Mechanical Group Process Improvement Assessments.* As part of the continuing improvement process, the Mechanical Group SACP team instituted a plan to conduct process-improvement assessments at three terminal locations selected by FRA’s labor partners during CY 2003, in addition to monitoring FRA defects and defect ratios system-wide. The assessments have proven to be a valuable tool in improving safety conditions and mechanical department performance in inspections, tests, and repairs for rail equipment.
- *Roadway Worker Protection (RWP) Communication Program.* In response to an October 2003 maintenance-of-way employee fatality, which resulted from a failure to fully implement Roadway Worker Protection (RWP) procedures, BNSF, BMWE, and FRA initiated a comprehensive communication program. With assistance from FRA’s Track Safety Headquarters staff, a SACP team also initiated an RWP process review to identify areas in the railroad’s RWP program that could be strengthened. FRA identified a number of improved processes and standards for both engineering and operating department employees. FRA aims to continue to work this initiative in 2004.
- *Signal System Inspections.* The Signal and Train Control SACP team began a process with management, labor, and FRA to evaluate FRA-required signal system inspections, defect data, and BNSF signal-trouble report records (from BNSF’s Network Operations Center (NOC) Signal Desk) to identify signal maintenance territories with inordinately frequent signal problems or defects, and then to analyze root causes for defects and problems. The team considered staffing and workloads in its evaluation. During 2003, the team conducted three territory assessments, and identified only minimal changes in workload distribution that were needed to achieve improvements in operational safety and signal system reliability. Management and labor agreed to continue this project into 2004, assessing signal maintenance territories identified by the labor group or FRA as potential opportunities for improvement.
- *OPTI Program.* FRA’s Operating Practices (OP) discipline conducted follow-up assessments on a regional basis to evaluate implementation of FRA’s recommendations from the 2002 assessment of BNSF’s Operations Tests and Inspections (OPTI) Program. FRA determined that the implementation of the railroad’s OPTI program has substantially improved, and is having a positive impact in reducing the risk of human-factors-caused accidents through aggressive rules testing and compliance enforcement. Through a SACP initiative, regional OP staffs were able to monitor program implementation through delivery of OPTI program records (in an Excel spreadsheet format) to FRA on a quarterly basis. Using Excel, FRA has the ability to sort and analyze the data efficiently and effectively to support the agency’s field compliance inspections. This has contributed substantially to reductions in human-factors-caused accidents and injuries for 2003, and will be continued in 2004.

- *Crew Resource Management (CRM)*. Working with FRA’s Office of Railroad Development, Office of Safety, and BNSF, the Texas Transportation Institute (TTI) and Texas A&M University developed a pilot project training program to apply Crew Resource Management (CRM) research to the railroad industry. With FRA assistance, BNSF’s senior safety department managers selected the Alliance, Texas, terminal and main track operations in North Texas as the test bed for this project. The project was scheduled to begin in the first quarter of 2004. A SACP subcommittee has been monitoring the development and implementation of the project, and has continued its involvement by contributing information on a variety of safety issues and concerns to FRA and TTI’s researchers.
- *Switching Operations Fatality Analysis (SOFA), a SACP Initiative*. For 2003, BNSF continued its “Seven Deadly Decisions” program in response to, and as a method of, communicating the SOFA committee’s Five Life Saver recommendations. The periodic publication of the SOFA committee’s research findings into the causes of employee fatalities and catastrophic injuries continued to be distributed to employees and managers in all crafts working in rail yards and around moving equipment. The railroad uses a variety of means to carry the SOFA message to employees, including SACP communications, videos and publications, as well as through its Operational Testing program. Additionally, information concerning severe injuries and fatalities has been incorporated into daily job briefings for operating crews.

2. CSX Transportation Company (CSXT)

Overview

In order to achieve its stated goal to create smaller, more responsive, and streamlined organizations focused on driving operating income up and better realizing its full potential, CSX Corporation plans to streamline the management structure at a number of its companies, eliminating organizational layers, and realigning certain functions.

The process now underway is the result of an organizational assessment focused on management efficiency and processes, clarity of roles and responsibilities, and departmental structure. The streamlining will reduce management layers from eleven to no more than eight, and will increase the number of direct reports for many managers. Streamlining will also reduce the non-union workforce by 800 to 1,000 people.

The CSXT SACP Project Manager and Team Leaders continuously monitor and analyze CSXT statistical data to determine any significant changes in safety leading indicators. In addition to data analysis, the SACP team relies on discipline-specific team reviews and audits to measure the status of each SACP safety issue or concern.

SACP Improvements and Other Safety Activities

Performance Reviews. To determine the carrier's compliance with Federal regulations and the actions taken by the carrier for those non-complying safety concerns, the team conducted performance reviews in the areas listed below in 2003:

- Hazardous Materials and Documentation. In addition to monitoring the train documentation portion of the original audit findings, the CSXT SACP added a new category concerning train make-up in the fall of 2002. This additional category is the result of numerous complaints from train and engine service employees regarding train documentation. The majority of the alleged complaints were found at interchange points of the major Class I east/west gateways.

Concurrent with the SACP initiatives, FRA Region 3 launched a regional audit to address the same issue. Its audit findings reflected the same concerns, particularly at major terminals, and resulted in the recommendation of more than \$2 million in violations.

The compliance history of inadequate "required documentation" by CSXT renders the issue of critical importance and one that was addressed by the FRA Administrator consistent with the guidelines of the new "Responsibility-Based Enforcement Policy."

CSXT submitted an action plan to FRA to address the non-complying conditions across the railroad's system in the same manner it has within FRA's Region 3, with some added stipulations, including training, efficiency testing, and a requirement to walk all trains prior to departure in terminals where documentation reflects a defect rate of 10 percent or greater.

At the start of 2003, consist error rates for documentation and placement were estimated to be approximately 31 percent by CSXT; subsequent investigations by FRA investigation showed an error rate of about 29 percent. To stem the increase of train consist error rates, CSXT and FRA Hazardous Materials personnel devised a series of initiatives to drive these numbers down. These initiatives included increased training, increased efficiency testing, root-cause analysis, and, in some cases, enforcement by regional personnel.

The result of these initiatives has shown that consist error rates have declined dramatically, from FRA's reported 29 percent to approximately 7 percent, as verified by FRA's national hazardous materials audit conducted in the last quarter of 2003. CSXT and its SACP team are committed to driving these numbers still lower to ensure that those responding to an accident or incident are able to depend on the information they receive upon arrival at the site.

- Part 217 Operational Tests and Inspections. CSXT responded favorably to SACP performance-review audits of the railroad's "Program of Operational Tests and Inspections." An audit review disclosed that CSXT revised its program of operational

tests/inspections to address previous FRA SACP concerns. To determine compliance with program revisions, follow-up field inspections are planned for 2004.

- Part 225 Reporting and Allegations of Harassment and Intimidation. During 2003, labor leaders complained that CSXT managers were trying to manage the injury reporting numbers instead of managing safety. The FRA SACP Project Manager received approximately 35 complaints alleging harassment and intimidation of employees. The complaints alleged that employees were being coerced not to seek medical treatment after they were injured and that, if they did go to a physician, employees were encouraged not to accept anything that might make it reportable. Another tactic allegedly used by carrier officers was to claim the employee falsified the injury report, and the reporting officer would arbitrarily decide not to report the injury to FRA.

The SACP Team initiated an audit to determine the validity of the allegations, and discovered two significant findings in its audit. First, the CSXT reporting officer had been arbitrarily making decisions not to report personal injuries. Second, the Western Region -- reported by CSXT as the safest region on its system -- had been under-reporting injuries. The managers from this region employed a culture of harassment and intimidation towards workers who got hurt, and claimed employees were falsifying their injury reports in order to avoid reporting.

The Team conducted a "records" inspection of all the non-reportable injuries from September 2001 to April 2003, in addition to 35 specific cases of possible harassment/intimidation that were received from an anonymous source. The Team pulled a total of 250 files randomly in the specified time frame, resulting in 28 violations; 64 percent of these were from the Western Region. Of the 35 anonymous cases reviewed, 23 (65 percent) were from the Western Region. Additionally, eight cases bordered on harassment and intimidation. Six (75 percent) occurred in the Western Region.

The consensus of the inspection team was that CSXT had created an atmosphere or culture that was sending a message to the employees that, if they did get injured, they would be charged with giving false statements, lying, giving conflicting statements, concealing information, late reporting, failure to report defective equipment, and insubordination. The result of which would be dismissal without compensation, pending a formal investigation by the carrier.

The CSXT responded very favorably to the audit findings, taking corrective action on each of the Federal non-compliance concerns. Additionally, CSXT developed an instructional video addressing the proper handling of personal injuries for officers, changed its Internal Control Plan, and sent out a new policy letter concerning the handling of personal injuries.

- Drug and Alcohol System Review. As part of its Safety Assurance Compliance Program (SACP), FRA conducted a review of the CSXT's Alcohol and Drug Program with CSXT staff. Although deficient in many cases, the FRA SACP team found the railroad's

program to be in overall compliance with the complex Federal program. The Team outlined a number of non-complying concerns in the FRA report to CSXT. In 2004, FRA planned to conduct a follow-up inspection to determine CSXT's corrective action.

- Locomotive Engineer Certification. During March 2003, the Operating Practices (OP) SACP team conducted an audit on CSXT Locomotive Engineer Certification records. This audit focused on the record keeping requirements of 49 CFR Part 240, Qualifications and Certification of Locomotive Engineers. Although entered in several databases, the audit disclosed that CSXT has complied with Federal regulations by ensuring that the data is available for inspection by FRA representatives.
- Track Compliance Agreement. FRA continued to monitor the components of the "Track Compliance Agreement" implemented on CSXT on April 20, 2000. In the fall of 2003, FRA began hearing concerns in the field about inadequate manpower, specifically the size of the basic force and how it adversely affected track inspections. This information was relayed to the SACP process through numerous sources, which included BMW officials, CSXT track inspectors, and FRA track inspectors. The BMW general and vice general chairmen stated that the CSXT track inspectors believed that their "playbooks" were being changed, as well as their duties, without prior notice to FRA or the BMW leadership.

To further burden the CSXT basic force, human-factors derailments increased (this issue directly affects Maintenance of Way forces available time to perform track maintenance); track and time for basic repairs and inspections decreased by 12 percent; and the FRA track-defect rate rose in 2003, compared with the 2002 rate.

CSXT senior managers listened to FRA's concerns and agreed to conduct listening sessions at 14 different locations across the CSXT system, and helped to facilitate time and meeting locations for FRA to conduct interviews with all track employees concerning playbooks, inspections, rest, and manpower issues.

Eighty-six track employees were interviewed at eight different geographic locations across CSXT, with 23 being track inspectors. Eighteen of these inspectors were new to the job, and were not involved in writing the original track inspection playbook. Thirteen inspectors stated that their playbooks had been changed before they started. All of the 18 inspectors questioned said that they still follow the playbook process and are given enough time to complete their track frequency.

- *Railroads Shop Practices, Calendar Day Inspections, Pre-departure Inspections*. Audits of CSXT locomotive shops were performed in Selkirk, New York; Cumberland, Maryland; and Corbin, Kentucky. Local FRA inspectors, a union representative, and a CSXT manager performed an audit in Waycross, GA. These inspections produced minimal defects detected on 92-day inspections of locomotive and calendar day inspections. After the audits, CSXT locomotive management, union representatives, and the FRA local inspector conducted a meeting, where all deficiencies were reported and better inspection procedures were

recommended. SACP projects were closed systematically, and will be monitored by local FRA inspectors during routine inspections of motive, power, and equipment.

- *Hazardous Materials Audit Plan.* As part of the overall effort to drive down consist errors even further, 2004 finds the Hazardous Materials (HM) SACP looking at the CSXT efforts to refine training for both clerical and mechanical employees. Clerical employees are responsible for generating the documents that train crews depend on for transporting hazardous materials, while mechanical employees often have the last look at the train before departure. These initiatives build on the gains made in 2003, such that none would be surrendered in 2004, despite the offset in personnel. Finally, as part of this year's effort, the HM SACP will look at CSX Intermodal for procedures that accept and ultimately offer hazardous materials to CSXT for transportation. Non-accident releases from intermodal packages appear to be rising, though the trend for bulk packaging continues to decline.
- *Operating Practices (OP) SACP Initiatives and Audit Plan.* In 2004, the primary focus for the Operating Practices (OP) SACP team will be on human-factors-caused accidents. This is the leading cause of operating-related derailments, and CSXT leads the other Class I railroads in this causal factor. The OP SACP team plans to audit CSXT records to determine the extent of compliance with operational tests/inspections involving Amtrak/commuter trains; plans to conduct a SACP follow-up audit to ascertain compliance with accident/incident reporting; and plans to perform a follow-up audit to determine compliance with alcohol/drug regulations. Additionally, the OP team plans to work with management and labor on a crew-resource-management pilot program on the CSXT Central Division.
- *Track SACP Initiatives and Audit Plan.* The Track SACP team leader will continue to work on strengthening the partnership between the Brotherhood of Maintenance Employees (BMWE) and CSXT officials, and will continue to monitor those components in the Track Compliance Agreement. The team plans to conduct six listening sessions with BMWE employees and first-line supervisors. Additionally, the track SACP plans to focus on Roadway Worker safety issues and awareness.
- *Motive, Power, and Equipment Audit Plan.* The FRA Motive Power and Equipment (MP&E) team leader will continue to monitor data to determine if any significant changes in safety statistics are occurring. Additionally, FRA regional findings uncovered during focused audits in terminals across the CSXT system in 2004 will serve as leading indicators in the SACP process.
- *Signal and Train Control Audit Plan.* A meeting was scheduled for early 2004 to address defective insulated joints and to schedule a field review to determine what circuit plans are complete and available for inspection. Further, the Signal Maintainer testing-time issue will continue to be addressed and reviewed in 2004.

3. Canadian National Railroad (CN)

Overview

Canadian National (CN) Railroad's senior management embraces the Safety Assurance Compliance Program (SACP) as a way to work with rail labor and FRA to address safety issues and resolve systemic safety problems. To further enhance safety in 2004, the existing CN Safety Resolution Process will continue to be used to resolve those safety issues that are not successfully handled within the 17 local safety committees currently being held in the CN's United States territory.

SACP Improvements and Other Safety Activities

- *Collaborative Approach.* A new resolution process has been developed to resolve safety issues and concerns that cannot be resolved at the local level. The three-step approach is a collaborative effort among management, labor, and FRA. Each step involves senior management, and such involvement is only necessary when all efforts to settle the issue at the local level have been exhausted. The resolution process is posted on the CN Employee Website, and is provided to each Health and Safety Committee member. The process empowers the safety committees and supervisor to handle safety issues, on a timely basis, as they arise.

In 2004, the FRA SACP Project Manager will work closely with CN management and labor to establish an effective partnership whereby management, labor, and FRA collaboratively work together to achieve a level of safety that will improve the quality of life for all CN railroad employees.

- *Local Safety Committees.* This year, FRA has become more involved in local safety committees throughout the CN system within the United States. Each committee has had a FRA representative to participate on that committee. This effort has further enhanced the partnership between CN's management and labor crafts. Additionally, it has served to improve communication among all partnership members.

4. Kansas City Southern Railway Company (KCSR)

Overview

During 2003, Kansas City Southern Railway Company (KCSR) continued its commitment to be the safest railroad in North America. Through SACP leadership, KCSR enlisted 24 local safety committees throughout the system to inform and initiate safety measures that provide employees with an injury-free work environment. Each safety committee focused on ensuring a quality work environment through a cooperative effort that involved labor, management, and FRA. These teams were empowered to take ownership of local safety issues by conducting audits and by implementing improvements.

On March 9, 2004, a planning meeting with SACP was held to develop 2004 initiatives and actions plans and finalize the SACP Charter. A prime goal of the March 2004 meeting was the implementation of a cross-functional safety steering committee to formulate annual safety plans and initiatives, including key accountabilities and responsibilities.

SACP Improvements and Other Safety Activities

- *SACP Process Improvements and Audit Results: Improved Communications.* On the operating side, significant results have been achieved regarding KCSR's safety process. As a result of several personal injuries in the Shreveport Terminal area, terminal employees decided to form a joint craft/carrier safety committee that meets monthly to focus on safety concerns. After each meeting, the committee travels out to the field to identify and address any safety issue observed. Managers and employees from all crafts participate, including mechanical, track, clerical, and transportation.

A key agenda item was implementing a "Critical Incident Desk" process to be supported by Unicenter Service Plus software to more effectively report and track safety-related events on the railroad. Such events would include derailments, train accidents, crossing incidents, and personal injuries. This new process would provide centralized reporting and follow-up. Another top goal was the development of a database to help monitor and track safety committee activities throughout the railroad. This will provide the ability to view and share ongoing activities, monitor team progress, and identify common issues.

- *Shreveport Mechanical Issues Improved.* FRA inspections at Shreveport reflect significant improvements in locomotive inspection and repair. FRA attributes the improvements to the hiring and training of additional employees to inspect and maintain the locomotive fleet. Considerable progress has been made in the short term. FRA believes this trend will contribute to further success.
- *Dispatching Workplace Environment Improved.* An audit conducted in July 2003 raised concerns regarding KCSR's dispatching office. In response to FRA dispatching office concerns, KCSR has made progress. One specific issue addressed was the noise level. KCSR has moved some employees from its dispatching office, and has committed to take other actions to reduce the level of noise in the immediate area of the dispatchers.
- *Reduction of Reportable Injuries, Loss Time, and Overall Train Accidents.* For 2003, reportable injuries declined 12 percent. Due to less severe injuries and improved case management, loss of time associated with injuries also decreased by 38 percent. In 2003, all train accidents decreased by eight percent and more costly, reportable train accidents fell by 27 percent (from 2002). The Engineering Department, which finished with an estimated 1.27 injury-frequency ratio, showed the most dramatic improvement for the year. Levels for the previous three years were 2.77, 2.61, and 2.79, respectively. Thus, KCSR realized several significant safety accomplishments.

- *Senior Management Involvement.* In August 2003, KCSR senior managers and the FRA SACP project manager participated in a 400-mile hi-rail safety trip extending from Wylie, Texas, to Baton Rouge, Louisiana. Throughout the hi-rail trip, KCSR senior management and the FRA SACP project manager met with several labor crafts to foster safety. Further, they met with local KCSR safety committee participants at night to collaboratively enhance the safety process. In addition to the positive interaction with local safety committee members, the hi-rail trip also allowed KCSR management and FRA to meet with employees who do not normally participate in the safety committees. The trip reinforced KCSR senior management's commitment to safety, and supported local managers regarding their safety messages.
- *Injury-Free Awareness.* In early 2003, KCSR established the "Life Saving Rules For Me" Campaign. Based on their assessment that these rules held the greatest potential to prevent employee injuries, railroad officials selected the campaign's ten rules. KCSR developed job briefing sessions, operational testing, and posters to enhance communication of the rules to all craft employees, and to ensure the importance of adhering to these rules.
- *Hazardous Materials Documentation Compliance Initiative.* Initial FRA inspections performed early last year reflected a deficient level of compliance, notably regarding train list documentation of hazardous materials. In response to this deficiency, the FRA SACP Team Coordinator of Hazardous Materials implemented a system-wide focus, which led to a significant increase in compliance. FRA's enhanced focus is expected to assist KCSR in the future in maintaining the increased level of compliance in this area.
- *Grade Crossing Safety and Crossing Closures.* KCSR continues aggressively pursuing the closing or consolidation of crossings, continues making crossing warning improvements, and continues minimizing the need for additional crossings. In 2003, KCSR closed 12 public crossings; in 2004, the goal was to close another 15-25 crossings. KCSR installed or upgraded a total of 50 crossing signals throughout the system.
- *Operating Practices: Part 217 Operational Testing Program Enhanced.* As a result of an audit led by the FRA SACP Operating Practices team coordinator in 2002, recommendations were made on how KCSR could improve efficiency testing. The outcome of KCSR's revision to its Operational Testing Program was implemented effective March 1, 2003. The program demonstrated a well-thought-out approach, clearly compliant with the letter of the rule and the intent of the specific regulations regarding Operational Testing Programs. The new program also incorporated tests specific to remote control operations, as well as provided an employee feedback process. FRA observed rapid evolution of both the generation of reports and effectiveness of the Operational Testing Program. KCSR management performed 42,000 operations tests in 2003 (12,000 more than in 2002).

5. National Railroad Passenger Corporation (Amtrak)

Amtrak West Overview

Due to Amtrak's abandonment of the "Regional Approach" in 2003, the Amtrak West SACP Oversight Group did not meet. After injury ratios failed to meet their goals (a dramatic increase in injuries per rule violations), Amtrak opted for District Safety Meetings, which began in September 2003, with FRA's insistence on a safety process. By January 2004, some very modest improvements were seen. FRA attended the District meetings when possible, but the scheduling of the meetings has been unpredictable and erratic. Numerous meetings have been held with each Region, with as many as three meetings per month. Meetings have been attended by operating and shop craft employees, FRA staff, and appropriate freight-railroad representatives. FRA has been concerned with Amtrak's local approach; the absence of oversight does not allow FRA, Amtrak, or union organizations the opportunity to recognize systemic issues that may be developing, and does not provide continuity throughout the Regions. FRA is concerned, and it will continue to encourage Amtrak to adopt a more formal and uniform divisional or regional approach. District Safety Committees did receive training in late 2003 called, "Safety Committees: Profile in Effectiveness," designed to provide skills sets for District committee members.

Eastern Region Overview

In 2003, FRA worked through numerous logistical and operational issues with Amtrak and the Massachusetts Bay Transportation Authority in facilitating the implementation of Amtrak's Advanced Civil Speed Enforcement System (ACSES) on the Northeast Corridor between Junction, Mile Post 213.9, and Cove, Mile Post 228.0. Concurrently, ACSES was implemented between Mill River, Mile Post 73.6, and High Street, Mile Post 142.9, to provide continuous positive train control between New Haven, CT, and Boston, MA. Through FRA's determination and commitment, this ACSES milestone was realized.

6. Norfolk Southern Corporation (NS)

Overview

The senior management of Norfolk Southern (NS) Corporation worked with the Safety Assurance Compliance Program (SACP) to address regulatory and non-regulatory issues. Although the Brotherhood of Railroad Signalmen (BRS) and Brotherhood of Maintenance of Way Employees (BMWE) did not formalize a SACP in 2003, the SACP process proved effective in resolving issues for each of those organizations. FRA believes that this ought to help foster trust in the process and to lead the way to establishing a formal SACP with these organizations soon. The SACP Project Manager will continue to work on strengthening this relationship.

SACP Improvements and Other Safety Activities

- *Lockout Tag-Out.* NS was in the process of updating the program. SACP committee ensured that it continued to move forward. The training and revisions at the six locomotive running-repair shops and two back shops are 50-75 percent completed. An outside consultant is assisting the mechanical department.
- *Job Briefings.* NS developed a video for shop craft employees. SACP kept training moving forward. NS included job briefings in the 2003 annual fall safety workshops.
- *SACP Committees.* The SACP shop craft committee continued building on work started in 2002, and moved forward on several issues.
- *Locomotive Event Recorders.* In March 2003, an FRA inspection found NS had no written instructions available for inspecting and testing of locomotive event recorders at its six locomotive shops. As a result, several serious violations were filed. SACP, along with Region 3, worked with NS on corrective action. NS developed instructions, and placed them on its computer system for locomotive shop access. NS also purchased testing equipment. Through regional inspections in November 2003, the NS written and testing programs were found to be in compliance.
- *Roadway Worker Protection (RWP) Efficiency Testing.* In 2002, SACP identified concerns through joint inspection activity with Region 2. NS maintains computerized RWP records for DOT. Engineering department testing is maintained by hard copy; consequently, it lacks uniformity in testing and documenting. In 2003, SACP continued discussions relating to computerized records. Although not a regulatory issue, computerized record keeping would permit uniformity in testing and documentation. NS is currently reviewing the efficiency-testing program and its computer capability.
- *Roadway Worker Protection (RWP).* SACP, FRA Region 4, and BRS addressed concerns on the RWP application in hump yards by holding a meeting in Elkhart, IN, which included NS senior management. The meeting covered FRA interpretations and application. The meeting resolved all concerns. Furthermore, NS reviewed the RWP application with management of its other hump yard locations.
- *Locomotive Shop Maintenance/Calendar Day Inspection.* Previously, SACP noted that shop documentation was not being properly completed and maintained. In addition, FRA found a lack of uniformity in the records used. SACP conducted a FRA/State multi-regional locomotive shop inspection, and had discussions with senior mechanical staff. In late 2001, NS developed and issued a uniform locomotive shop work report. NS implemented new 92-day form, ME-65, and a new calendar-day inspection, ME-60, in November 2002. NS-1 Rule L 240 was re-written for the new forms. In November 2002, training began on the new forms, and continued through the operating rules classes during the first quarter of 2003. FRA inspections revealed that shop documentation was better, and calendar-day compliance improved 50 percent over the same period in 2002.

- *Grove Crane.* In February 2003, SACP and Region 2 started addressing a Brotherhood of Maintenance of Way Employees (BMWWE) concern involving the former Conrail rubber-tired cranes. The cranes have computers that help the operator determine tilt factors and tension loads. Employees were using the cranes without the computer system being operational, and training on the cranes was minimal. SACP, the manufacturer, and NS discussed taking action. NS developed a training program, consisting of classroom and field sessions specific to these cranes. Along with follow-up field exercises, training began in March, and involved the operators, repairmen, supervisors, and foremen. All rail gangs completed training in September.
- *Block Swapping.* Since the Conrail acquisition, the Committee addressed changes to train operations. An inspection was initiated at Conway, PA, to address labor concerns. The inspection found train blocks were not being inspected due to poor communication between the transportation and mechanical departments. Subsequently, NS addressed communication policy, and a follow-up inspection found NS in compliance.
- *Signal and Train Control (S&TC): Pole Line Vegetation.* SACP addressed a Brotherhood of Railroad Signalmen (BRS) vegetation concern on the 130-mile Winston Salem Line. SACP and FRA Region 2 inspected the 100 miles in the region, finding numerous defects. The SACP S&TC team leader met with engineering officers, and confirmed that the remaining trackage may be in a similar condition. Within two weeks, NS presented a plan to FRA that assigned equipment and employees to clear vegetation. The plan estimated 25 miles a month, depending on the amount of vegetation removal per mile. In December 2003, SACP inspected mileposts eight to 48, and found corrective action had been taken. The track department had also sprayed miscellaneous areas from mileposts 10 to 82. To assure completion, the SACP team leader will continue to monitor.
- *Operating Rules Efficiency Test Program.* In late 2001, the SACP project manager began discussions with NS. In 2003, the Operating Rules Department revised the program with an effective date of June 1, 2004. NS has conducted officer training on the new program. NS senior management and the SACP project manager are also exploring the potential of providing efficiency testing data to FRA in an electronic spreadsheet format. In September 2003, FRA gave its desired categories to NS's information technology program.
- *Electronic Hours of Service Record Keeping Program.* A follow-up by the SACP and Regions 2, 3, and 4 documented roughly 200 deficiencies for failure to properly report deadheads and for incomplete reports. In conjunction with the action plan of 2002, FRA headquarters' and regional staff reviewed reports to determine if deficiencies are the result of program logic or employee errors. The program experienced several modifications in 2002 to correct FRA findings from the previous year. Under the waiver process, the SACP continued monitoring the revisions. NS allocated funding to purchase a new record keeping system, with projected implementation in 2005.
- *Train Dispatcher Electronic Train Sheets.* The SACP began meetings with the American Train Dispatchers Association (ATDA) concerning the electronic train sheets on the

Northern Region, conducting a listening session in May 2003 in Harrisburg, PA. The listening session identified the following issues: (1) Data entries were not always completed; (2) Less data or review was available to the train dispatcher than on the previous hard-copy train sheets; (3) Some operational starting (OS) points needed to be entered manually; (4) Trains were dropped when changing divisions; and (5) Data collection by the train dispatcher was sometimes cumbersome. In June 2003, a SACP and Region 2 review of the Harrisburg Division found concerns valid and systemic. Upon conducting a meeting with NS management, immediate revisions addressing the ATDA concerns occurred. In October 2003, NS initiated further revisions, which are ongoing in the computer system. The SACP team leader has been monitoring the progress.

- *Unhealthy/Unsafe Working Conditions.* Because of a large infestation of rats and the corresponding destruction of footing from the burrowing of tunnels, the SACP worked with the United Transportation Union (UTU) on alleged unsafe and unhealthy working conditions at the Debutts Yard in Chattanooga, TN. Since Federal regulations were not applicable, the SACP project manager stepped in to resolve the problem. Previous communication between UTU and NS management had been at the local level. The SACP worked with the NS Terminal management, local UTU, and the State of Tennessee to address the problem with senior NS management and counsel. This led to an on-site meeting between UTU and NS senior management. The SACP project manager monitored developments, and found labor concerns addressed.
- *Intimidation and Harassment.* As a result of several investigations into UTU complaints, the SACP began discussions with NS senior management in response to FRA concerns of alleged improper employee handling after being injured. FRA recommended that NS and labor take advantage of using the railroad's internal controls. SACP involvement led to meetings between NS and UTU to resolve these issues. FRA continues to take enforcement action for individual cases where the facts warrant. The process continues.
- *Hours of Service Yardmasters.* The SACP worked with the American Train Dispatchers Association (ATDA) and United Transportation Union-Yardmasters (UTU-Y) on the NS policy of not having yardmasters covered under the Hours of Service Law. NS had moved some Fort Wayne, IN, train dispatcher workloads to the yardmaster position at Bellevue, Ohio, and Birmingham, Alabama. The SACP Project Manager worked with Regions 2 and 3, initiating conference calls. The calls led to a proper application of commingled service and the Law.
- *Crew Management.* The SACP initiated a meeting between FRA Headquarters, Dr. Steven Hursh (Program Manager, Biomedical Modeling and Analysis, Science Application International Corporation (SAIC)), and David Brown (General Manager, Northern Region and chairperson of the NS train scheduling committee). Working with FRA to identify fatigue and crew scheduling, Dr. Hursh conducted a presentation on crew management. NS elected not to participate at this time.

- *Association of American Railroads (AAR) Hazardous Materials (HM) Oversight Committee.* The NS SACP Project Manager and FRA Headquarters HM Division staff continued meeting with the committee to discuss FRA concerns regarding HM train documentation and placement. In October 2003, the NS SACP manager worked with FRA Headquarters HM Division staff to initiate a national, multi-regional Federal and State HM inspection. Each inspector reviewed the Class I railroads in his/her territory, and reported the findings, using the same format. This permitted an equal analysis for each railroad, and tended to be more detailed than the current Railroad Inspection Personal Computer (RISPC) program. Overall, defective rates ran around eight percent. The analysis and meetings are continuing to develop corrective action.
- *Hazardous Materials (HM) Efficiency Testing.* In 2002, the SACP Project Manager began discussions for a revision to the NS HM efficiency-testing program. The testing only reflected one test (GR-20). This test lacks the ability to identify the actual observation/test the supervisor made. In 2003, NS drafted a revision, with a total of 29 tests or observations to be implemented. The new program reflects the United States HM Code and FRA's HM inspection program. The revised testing program will permit a better review between FRA HM inspection activity and NS officer activity. The program was scheduled to be implemented with the Operating Rules testing program on June 1, 2004.

7. Union Pacific Railroad (UP)

Overview

UP's senior management continues to embrace the SACP initiated in September 1997, and work with rail labor and FRA to address regulatory and non-regulatory systemic safety issues and concerns.

SACP Improvements and Other Safety Activities

- *SACP Oversight Committee.* The SACP Oversight Committee continues to promote the process and methodology of the SACP by reaching out to regional vice presidents, superintendents, safety captains, and shop directors, who oversee the system's 300-plus local safety committees. In July 2003, the Committee disseminated the process guidance material in two formats: electronic correspondence and paper mailings. Contained in the correspondence were the Safety Issue Escalation Form, guidelines, and posters. The posters defined the SACP process guidelines, and were to be displayed at locations where UP safety meetings are conducted.
- *Grade Crossing Safety and Trespass Prevention.* The Grade Crossing working group continues to emphasize areas of high-incident occurrences (trespasser, vehicular accident, near miss) and, where multiple grade crossings exist, reviews locations for feasible engineering upgrades. Moreover, the working group believes that seldom-used and poorly located highway-rail grade crossings are prime targets for closure. Additionally, the Grade Crossing working group continues to focus on building community coalitions with local, city,

county, and State governments to improve highway-rail grade crossing safety, assist law enforcement and judicial figures, and reduce trespass occurrences.

Grade crossing incidents were reduced from 535 in FY 2002 to 492 in FY 2003, reflecting an 8.7 percent decrease, and grade crossing fatalities rose from 69 in FY 2002 to 72 FY 2003, reflecting an increase of 4.3 percent.

During FY 2003, the UP projected 300 public and private grade-crossing closures. The railroad physically removed 362; 121 more have yet to be removed. Thus, 483 grade crossings will be closed in all, exceeding the projected goal by 183. The UP grade-crossing closure goal for FY 2004 is another 300 grade crossings.

The UP continues its professional driver-training program with Swift Trucking, Inc. The UP now trains Swift's directors of safety, who in turn perform location-specific training. The ongoing training program encompasses the operational environment of trains/tractor-trailers at/or near grade crossings. The Grade Crossing Working Group received the support of labor organizations (BRS, BLE, UTU), and encouraged employees to complete "Unsafe Motorist Reports" at crossings in an effort to profile crossings for enforcement, prospective closures, or engineering upgrades.

- *Crew Management Systems (CMS) and Harriman Dispatching Center (HDC).* During 2003, FRA conducted two monitoring reviews of Crew Management Systems (CMS) and three reviews of the Harriman Dispatching Center (HDC) to determine UP's long-term progression and commitment to its Action Plan, which was submitted in response to FRA's final report and recommendations issued on February 24, 1998. In its Action plan submissions, UP addressed manpower shortages, workload/territorial assignment, insufficient training, supervisory support, and employee/supervisory fatigue.

FRA findings showed that UP continues to address these areas at CMS and HDC, and demonstrated UP established FY 2003 hiring based on attritional demands, workload and territorial assignments, continued training, supervisory support, and fatigue mitigation.

- *Red Block Working Group.* The Red Block Working Group's goal is to eliminate trains passing wayside signals, red flags, and other devices that require a stop action to be taken by an operating train crew. To reach the goal, the working group has heightened the awareness of stop-signal incidents and the importance of cab communications by working with managers, signal employees, operators, dispatchers, and train and engine employees. In FY'03, the monitoring of incidents reflected the following system-wide percentage reductions: 2.56 percent stop-signal de-certifications; 47.44 percent main track de-certifications; and 43.33 percent speed de-certifications (as compared with FY '02).
- *Drug and Alcohol Program.* In December 2003, FRA conducted a Drug and Alcohol audit to determine UP's compliance with its previously submitted Pre-Employment Drug Testing Program. Specifically, the audit looked at where managers are performing hours-of-service conductor duties, transfer of internal employees, new hiring of trainmen from Canadian/U.S.

railroads, required pre-employment drug testing, and the associated completion/retention of records.

Because of conductor shortages, FRA found UP elected to use managers who had a transportation background to perform conductor duties in Los Angeles, Roseville (CA), and Tucson. Those managers who were not under the “grand-fathered” pre-employment provisions of 1986 were required to undergo pre-employment drug testing prior to performing conductor duties. Other employees from non-managerial or non-covered service positions (e.g., maintenance of way employees), entering into train service, were required to undergo pre-employment testing. Records were completed and retained for all employees. In addition, random samplings of “previous employer checks” were made to assure that UP had reviewed new-hire trainmen from other railroads and their prior alcohol/drug histories. Findings reflected that prior histories were reviewed and follow-up checks made by the UP’s police department.

- *Maintenance-of-Way, Locomotive, and Car Subgroups.* During 2003, the maintenance-of-way subgroup worked to address regulatory compliance, training, and staffing levels of employees required to conduct rail inspections. The track inspector GPS-Palm Pilot-based electronic track inspection/repair and record-keeping system was enhanced, updated, and fully implemented system-wide. Further, in July 2003, FRA reviewed and audited the system to assess its implementation and computer module enhancements. Audit findings confirm that UP has system-wide coverage, and show that UP has implemented training specific to regulatory requirements and computer operations and required remedial repair actions. Additionally, UP conducted territorial reviews of track inspector assignments, and adjusted field staffing, where applicable.
- *Signal and Train Control.* In FY 2003, the Signal Working Group continued to examine issues surrounding the Signal Maintenance Plan (designed to address signal-related matters at the lowest level possible). The Plan requires the local manager and local signal maintainer to jointly plan (time-manage) the testing schedule for a territory. In September 2003, the signal-working group completed its study of 10 maintenance territories, and compiled the information into a time-study report. The report excluded the highs and lows, and simply averages the median times required for completing various signal tests. This type of study, along with future similar studies, provides a valuable tool when assessing and/or determining the overall size of a maintenance territory.
- *Roadway Worker Protection (RWP) Initiatives.* During FY 2003, FRA, UP, the Brotherhood of Maintenance of Way Employees (BMWE), and the Brotherhood of Railroad Signalmen (BRS) continued to promote roadway worker protection. The group objective was to elevate awareness among employees to regulatory requirements and the safe performance of duties. Stakeholders continued to communicate issues and concerns surrounding roadway worker protection. Communication and activities included the following: UP safety audits; the dissemination of educational materials; BRS participation in local town hall meetings, and advisories in the BRS journal; BMWE working information reports in the BMWE journal; inclusion of RWP as a topic at union meetings, listening sessions, and town hall meetings;

UP Internal Television (ITV) broadcasts; and UP safety bulletins on Federal requirements, and access to training information.

- *Switching Operations Fatality Analysis (SOFA)*. A nationwide concern within the rail industry clearly identified 76 employee fatalities related to railroad switching operations. FRA reached out to various rail entities and labor groups to define general trends and patterns associated with FRA's fatal-accident case files. Based upon their review, the parties generated two sets of specific recommendations. To enhance the nationwide emphasis on switching operations, the UP SACP formed a new working group to ensure the communication of the SOFA recommendations throughout the UP system. The group focused on raising employee awareness of the five primary lifesavers.

Burlington Northern Santa Fe Summary Statistics

Category	2001	2002	2003	% Change From 2002	% Change From 2001
TOTAL ACCIDENTS/INCIDENTS	2,407.00	2,088.00	1,904.00	-8.81	-20.90
Total fatalities, all accidents/incidents (form 6180-55a)	126.00	149.00	133.00	-10.74	5.56
Total nonfatal cases	1,485.00	1,242.00	1,086.00	-12.56	-26.87
TOTAL EMPLOYEE ON DUTY CASES	1,067.00	854.00	725.00	-15.11	-32.05
--- Employee on duty rate per 200K hours worked	2.67	2.27	1.97	-13.43	-26.24
--- Employee on duty deaths	5.00	4.00	4.00	0.00	-20.00
--- Deaths involving moving on-track equipment	3.00	4.00	4.00	0.00	33.33
--- Nonfatal cases involving moving on-track equipment	166.00	139.00	131.00	-5.76	-21.08
--- Serious nonfatal conditions 1/	43.00	36.00	46.00	27.78	6.98
--- Less serious conditions	1,019.00	814.00	675.00	-17.08	-33.76
--- Cases resulting in days away from work	594.00	524.00	454.00	-13.36	-23.57
--- Days absent from work	45,163.00	49,964.00	32,180.00	-35.59	-28.75
Rail passenger deaths in train accidents and HRC incidents	.	.	.	.	.
Rail passenger injuries in train accidents and HRC incidents	.	.	.	.	.
Trespasser deaths	62.00	64.00	69.00	7.81	11.29
TRAIN ACCIDENTS (form 6180-54) Excludes HRC	623.00	538.00	552.00	2.60	-11.40
--- Collisions	15.00	19.00	35.00	84.21	133.33
--- Derailments	487.00	427.00	400.00	-6.32	-17.86
--- Other accident types	121.00	92.00	117.00	27.17	-3.31
--- Train accident deaths	1.00	3.00	1.00	-66.67	0.00
--- Train accident injuries	31.00	23.00	31.00	34.78	0.00
--- Train accidents per million train miles	3.82	3.32	3.18	-4.28	-16.76
--- Train accidents on main line	227.00	164.00	180.00	9.76	-20.70
--- Rate per million train miles 2/	1.52	1.10	1.12	1.99	-26.23
--- Accidents on yard track	302.00	293.00	302.00	3.07	0.00
--- Rate per million yard switching train miles	22.04	22.97	23.17	0.88	5.12
HIGHWAY-RAIL INCIDENTS (HRC) (form 6180-57)	473.00	462.00	403.00	-12.77	-14.80
--- Highway-rail incidents deaths	55.00	69.00	54.00	-21.74	-1.82
--- Highway-rail incidents injuries	181.00	169.00	155.00	-8.28	-14.36
--- Crossings inspected	539.00	837.00	764.00	-8.72	41.74
--- Defects recorded	1,103.00	1,288.00	788.00	-38.82	-28.56
--- Highway-rail incidents per million train miles	2.90	2.86	2.32	-18.62	-19.96
TOTAL INSPECTION REPORTS (form 96)	7,727.00	8,245.00	8,736.00	5.96	13.06
HAZMAT INSPECTIONS	896.00	904.00	1,269.00	40.38	41.63
--- Hazmat defects	1,190.00	860.00	1,044.00	21.40	-12.27
--- Hazmat releases in train accidents	9.00	5.00	4.00	-20.00	-55.56
--- Cars carrying hazmat in train accidents	2,065.00	1,614.00	2,126.00	31.72	2.95
--- Hazmat cars damaged/derailed in train accidents	268.00	200.00	222.00	11.00	-17.16
--- Cars releasing hazmat in train accidents	19.00	11.00	6.00	-45.45	-68.42
OPERATING PRACTICES INSPECTIONS	2,603.00	3,079.00	3,026.00	-1.72	16.25
--- Human factor caused accidents	221.00	218.00	260.00	19.27	17.65
--- Accidents on yard track	134.00	154.00	166.00	7.79	23.88
--- Operating practices defects	2,038.00	1,983.00	2,077.00	4.74	1.91
--- Railroad operating/safety rules exceptions 3/	1,901.00	2,779.00	3,018.00	8.60	58.76
SIGNAL AND TRAIN CONTROL INSPECTIONS	927.00	1,134.00	1,126.00	-0.71	21.47
--- Signal caused accidents	9.00	5.00	5.00	0.00	-44.44
--- Accidents on yard track	8.00	4.00	5.00	25.00	-37.50
--- Signal defects	2,329.00	3,681.00	2,159.00	-41.35	-7.30
TRACK INSPECTIONS	2,170.00	2,433.00	2,589.00	6.41	19.31
--- Track caused accidents	197.00	154.00	148.00	-3.90	-24.87
--- Accidents on yard track	98.00	82.00	81.00	-1.22	-17.35
--- Track defects	14,954.00	13,602.00	14,754.00	8.47	-1.34
MOTIVE POWER AND EQUIPMENT INSPECTIONS	2,225.00	2,063.00	2,185.00	5.91	-1.80

Category	2001	2002	2003	% Change From 2002	% Change From 2001
--- Motive power/equipment caused accidents	112.00	94.00	59.00	-37.23	-47.32
--- Accidents on yard track	19.00	22.00	14.00	-36.36	-26.32
--- Motive power and equipment defects	15,569.00	11,627.00	12,578.00	8.18	-19.21
MISCELLANEOUS CAUSED ACCIDENTS	84.00	67.00	80.00	19.40	-4.76
Employee hours worked (form 6180-55)	79,952,918.00	75,101,971.00	73,650,604.00	-1.93	-7.88
Total train miles (form 6180-55)	162,943,990.00	161,813,974.00	173,448,392.00	7.19	6.45
Yard switching miles (form 6180-55)	13,699,547.00	12,755,848.00	13,032,426.00	2.17	-4.87

CSX Transportation Summary Statistics

Category	2001	2002	2003	% Change From 2002	% Change From 2001
TOTAL ACCIDENTS/INCIDENTS	1,863.00	1,657.00	1,886.00	13.82	1.23
Total fatalities, all accidents/incidents (form 6180-55a)	143.00	120.00	134.00	11.67	-6.29
Total nonfatal cases	1,119.00	859.00	975.00	13.50	-12.87
TOTAL EMPLOYEE ON DUTY CASES	806.00	636.00	729.00	14.62	-9.55
--- Employee on duty rate per 200K hours worked	2.44	2.00	2.29	14.69	-6.05
--- Employee on duty deaths	2.00	3.00	4.00	33.33	100.00
--- Deaths involving moving on-track equipment	2.00	2.00	3.00	50.00	50.00
--- Nonfatal cases involving moving on-track equipment	133.00	99.00	130.00	31.31	-2.26
--- Serious nonfatal conditions 1/	35.00	31.00	45.00	45.16	28.57
--- Less serious conditions	769.00	602.00	680.00	12.96	-11.57
--- Cases resulting in days away from work	679.00	538.00	607.00	12.83	-10.60
--- Days absent from work	77,751.00	68,231.00	54,249.00	-20.49	-30.23
Rail passenger deaths in train accidents and HRC incidents	.	.	.	.	.
Rail passenger injuries in train accidents and HRC incidents	.	.	.	.	.
Trespasser deaths	78.00	77.00	77.00	0.00	-1.28
TRAIN ACCIDENTS (form 6180-54) Excludes HRC	389.00	354.00	504.00	42.37	29.56
--- Collisions	85.00	46.00	29.00	-36.96	-65.88
--- Derailments	261.00	245.00	349.00	42.45	33.72
--- Other accident types	43.00	63.00	126.00	100.00	193.02
--- Train accident deaths	1.00	.	.	.	.
--- Train accident injuries	14.00	11.00	25.00	127.27	78.57
--- Train accidents per million train miles	3.58	3.22	4.68	45.40	30.77
--- Train accidents on main line	106.00	101.00	129.00	27.72	21.70
--- Rate per million train miles 2/	1.15	1.06	1.36	28.47	18.25
--- Accidents on yard track	243.00	205.00	321.00	56.59	32.10
--- Rate per million yard switching train miles	14.74	14.11	25.10	77.82	70.25
HIGHWAY-RAIL INCIDENTS (HRC) (form 6180-57)	521.00	536.00	524.00	-2.24	0.58
--- Highway-rail incidents deaths	63.00	39.00	52.00	33.33	-17.46
--- Highway-rail incidents injuries	206.00	142.00	157.00	10.56	-23.79
--- Crossings inspected	999.00	885.00	1,098.00	24.07	9.91
--- Defects recorded	4,090.00	2,487.00	2,968.00	19.34	-27.43
--- Highway-rail incidents per million train miles	4.80	4.88	4.87	-0.16	1.52
TOTAL INSPECTION REPORTS (form 96)	10,124.00	10,411.00	11,473.00	10.20	13.32
HAZMAT INSPECTIONS	1,119.00	1,233.00	1,505.00	22.06	34.50
--- Hazmat defects	2,304.00	1,978.00	1,811.00	-8.44	-21.40
--- Hazmat releases in train accidents	6.00	2.00	5.00	150.00	-16.67
--- Cars carrying hazmat in train accidents	677.00	638.00	1,315.00	106.11	94.24
--- Hazmat cars damaged/derailed in train accidents	69.00	78.00	155.00	98.72	124.64
--- Cars releasing hazmat in train accidents	11.00	2.00	7.00	250.00	-36.36
OPERATING PRACTICES INSPECTIONS	2,912.00	2,992.00	3,204.00	7.09	10.03
--- Human factor caused accidents	175.00	167.00	230.00	37.72	31.43
--- Accidents on yard track	138.00	115.00	183.00	59.13	32.61
--- Operating practices defects	4,587.00	5,104.00	7,792.00	52.66	69.87
--- Railroad operating/safety rules exceptions 3/	1,312.00	1,185.00	1,433.00	20.93	9.22
SIGNAL AND TRAIN CONTROL INSPECTIONS	1,468.00	1,474.00	1,562.00	5.97	6.40

Category	2001	2002	2003	% Change From 2002	% Change From 2001
--- Signal caused accidents	2.00	7.00	17.00	142.86	750.00
--- Accidents on yard track	2.00	7.00	16.00	128.57	700.00
--- Signal defects	7,535.00	5,895.00	6,759.00	14.66	-10.30
TRACK INSPECTIONS	2,664.00	3,069.00	3,796.00	23.69	42.49
--- Track caused accidents	108.00	103.00	137.00	33.01	26.85
--- Accidents on yard track	56.00	49.00	70.00	42.86	25.00
--- Track defects	12,374.00	14,780.00	19,348.00	30.91	56.36
MOTIVE POWER AND EQUIPMENT INSPECTIONS	3,890.00	3,736.00	3,702.00	-0.91	-4.83
--- Motive power/equipment caused accidents	31.00	30.00	37.00	23.33	19.35
--- Accidents on yard track	4.00	8.00	8.00	0.00	100.00
--- Motive power and equipment defects	30,659.00	26,543.00	26,381.00	-0.61	-13.95
MISCELLANEOUS CAUSED ACCIDENTS	73.00	47.00	83.00	76.60	13.70
Employee hours worked (form 6180-55)	66,130,498.00	63,702,671.00	63,667,250.00	-0.06	-3.72
Total train miles (form 6180-55)	108,619,574.00	109,901,185.00	107,613,819.00	-2.08	-0.93
Yard switching miles (form 6180-55)	16,483,473.00	14,523,572.00	12,789,407.00	-11.94	-22.41

Canadian National (U.S. Operations) Summary Statistics

Category	2001	2002	2003	% Change From 2002	% Change From 2001
TOTAL ACCIDENTS/INCIDENTS	623.00	540.00	587.00	8.70	-5.78
Total fatalities, all accidents/incidents (form 6180-55a)	44.00	34.00	20.00	-41.18	-54.55
Total nonfatal cases	401.00	324.00	340.00	4.94	-15.21
TOTAL EMPLOYEE ON DUTY CASES	301.00	259.00	277.00	6.95	-7.97
--- Employee on duty rate per 200K hours worked	3.48	3.19	3.51	10.10	0.83
--- Employee on duty deaths	3.00	1.00	2.00	100.00	-33.33
--- Deaths involving moving on-track equipment	3.00	.	1.00	.	-66.67
--- Nonfatal cases involving moving on-track equipment	64.00	56.00	62.00	10.71	-3.13
--- Serious nonfatal conditions 1/	19.00	8.00	12.00	50.00	-36.84
--- Less serious conditions	279.00	250.00	263.00	5.20	-5.73
--- Cases resulting in days away from work	206.00	177.00	179.00	1.13	-13.11
--- Days absent from work	13,900.00	8,725.00	9,465.00	8.48	-31.91
Rail passenger deaths in train accidents and HRC incidents	.	.	.	.	.
Rail passenger injuries in train accidents and HRC incidents	.	.	.	.	.
Trespasser deaths	8.00	17.00	9.00	-47.06	12.50
TRAIN ACCIDENTS (form 6180-54) Excludes HRC	117.00	110.00	105.00	-4.55	-10.26
--- Collisions	10.00	3.00	4.00	33.33	-60.00
--- Derailments	74.00	74.00	70.00	-5.41	-5.41
--- Other accident types	33.00	33.00	31.00	-6.06	-6.06
--- Train accident deaths	2.00	.	.	.	.
--- Train accident injuries	6.00	4.00	3.00	-25.00	-50.00
--- Train accidents per million train miles	5.11	5.14	4.98	-3.01	-2.44
--- Train accidents on main line	49.00	43.00	32.00	-25.58	-34.69
--- Rate per million train miles 2/	2.73	2.56	1.94	-24.17	-28.97
--- Accidents on yard track	55.00	53.00	61.00	15.09	10.91
--- Rate per million yard switching train miles	11.08	11.51	13.33	15.75	20.33
HIGHWAY-RAIL INCIDENTS (HRC) (form 6180-57)	194.00	151.00	188.00	24.50	-3.09
--- Highway-rail incidents deaths	32.00	16.00	9.00	-43.75	-71.88
--- Highway-rail incidents injuries	91.00	56.00	51.00	-8.93	-43.96
--- Crossings inspected	43.00	251.00	185.00	-26.29	330.23
--- Defects recorded	69.00	300.00	731.00	143.67	959.42
--- Highway-rail incidents per million train miles	8.47	7.05	8.92	26.50	5.35
TOTAL INSPECTION REPORTS (form 96)	1,679.00	1,741.00	1,874.00	7.64	11.61
HAZMAT INSPECTIONS	289.00	265.00	322.00	21.51	11.42
--- Hazmat defects	389.00	376.00	257.00	-31.65	-33.93
--- Hazmat releases in train accidents	2.00	3.00	2.00	-33.33	0.00
--- Cars carrying hazmat in train accidents	437.00	623.00	471.00	-24.40	7.78

Category	2001	2002	2003	% Change From 2002	% Change From 2001
--- Hazmat cars damaged/derailed in train accidents	90.00	109.00	53.00	-51.38	-41.11
--- Cars releasing hazmat in train accidents	5.00	6.00	8.00	33.33	60.00
OPERATING PRACTICES INSPECTIONS	559.00	477.00	571.00	19.71	2.15
--- Human factor caused accidents	48.00	50.00	57.00	14.00	18.75
--- Accidents on yard track	30.00	33.00	44.00	33.33	46.67
--- Operating practices defects	3,201.00	1,478.00	267.00	-81.94	-91.66
--- Railroad operating/safety rules exceptions 3/	371.00	287.00	293.00	2.09	-21.02
SIGNAL AND TRAIN CONTROL INSPECTIONS	120.00	211.00	155.00	-26.54	29.17
--- Signal caused accidents	3.00	.	.	.	.
--- Accidents on yard track	2.00	.	.	.	.
--- Signal defects	219.00	510.00	879.00	72.35	301.37
TRACK INSPECTIONS	431.00	502.00	654.00	30.28	51.74
--- Track caused accidents	35.00	41.00	25.00	-39.02	-28.57
--- Accidents on yard track	10.00	15.00	9.00	-40.00	-10.00
--- Track defects	3,322.00	3,195.00	4,103.00	28.42	23.51
MOTIVE POWER AND EQUIPMENT INSPECTIONS	528.00	661.00	583.00	-11.80	10.42
--- Motive power/equipment caused accidents	16.00	7.00	15.00	114.29	-6.25
--- Accidents on yard track	5.00	.	4.00	.	-20.00
--- Motive power and equipment defects	4,650.00	5,783.00	5,653.00	-2.25	21.57
MISCELLANEOUS CAUSED ACCIDENTS	15.00	12.00	8.00	-33.33	-46.67
Employee hours worked (form 6180-55)	17,286,034.00	16,241,076.00	15,776,096.00	-2.86	-8.74
Total train miles (form 6180-55)	22,917,852.00	21,420,699.00	21,082,183.00	-1.58	-8.01
Yard switching miles (form 6180-55)	4,965,739.00	4,603,079.00	4,576,913.00	-0.57	-7.83

Kansas City Southern Railway Summary Statistics

Category	2001	2002	2003	% Change From 2002	% Change From 2001
TOTAL ACCIDENTS/INCIDENTS	280.00	293.00	307.00	4.78	9.64
Total fatalities, all accidents/incidents (form 6180-55a)	21.00	21.00	16.00	-23.81	-23.81
Total nonfatal cases	126.00	137.00	129.00	-5.84	2.38
TOTAL EMPLOYEE ON DUTY CASES	64.00	90.00	83.00	-7.78	29.69
--- Employee on duty rate per 200K hours worked	2.41	3.20	2.97	-7.24	23.02
--- Employee on duty deaths	.	.	.	.	.
--- Deaths involving moving on-track equipment	.	.	.	.	.
--- Nonfatal cases involving moving on-track equipment	18.00	25.00	25.00	0.00	38.89
--- Serious nonfatal conditions 1/	2.00	5.00	5.00	0.00	150.00
--- Less serious conditions	62.00	85.00	78.00	-8.24	25.81
--- Cases resulting in days away from work	39.00	46.00	25.00	-45.65	-35.90
--- Days absent from work	3,398.00	2,404.00	1,934.00	-19.55	-43.08
Rail passenger deaths in train accidents and HRC incidents	.	.	.	.	.
Rail passenger injuries in train accidents and HRC incidents	.	.	.	.	.
Trespasser deaths	6.00	10.00	6.00	-40.00	0.00
TRAIN ACCIDENTS (form 6180-54) Excludes HRC	92.00	93.00	99.00	6.45	7.61
--- Collisions	8.00	8.00	16.00	100.00	100.00
--- Derailments	63.00	58.00	54.00	-6.90	-14.29
--- Other accident types	21.00	27.00	29.00	7.41	38.10
--- Train accident deaths	.	1.00	.	.	.
--- Train accident injuries	1.00	1.00	3.00	200.00	200.00
--- Train accidents per million train miles	12.01	10.88	11.80	8.50	-1.76
--- Train accidents on main line	30.00	27.00	31.00	14.81	3.33
--- Rate per million train miles 2/	4.54	3.66	4.35	18.77	-4.21
--- Accidents on yard track	44.00	55.00	44.00	-20.00	0.00
--- Rate per million yard switching train miles	41.60	46.45	34.69	-25.31	-16.60
HIGHWAY-RAIL INCIDENTS (HRC) (form 6180-57)	120.00	104.00	111.00	6.73	-7.50
--- Highway-rail incidents deaths	15.00	11.00	10.00	-9.09	-33.33
--- Highway-rail incidents injuries	60.00	45.00	31.00	-31.11	-48.33

Category	2001	2002	2003	% Change From 2002	% Change From 2001
--- Crossings inspected	35.00	41.00	55.00	34.15	57.14
--- Defects recorded	72.00	61.00	58.00	-4.92	-19.44
--- Highway-rail incidents per million train miles	15.67	12.16	13.23	8.78	-15.55
TOTAL INSPECTION REPORTS (form 96)	979.00	1,177.00	1,262.00	7.22	28.91
HAZMAT INSPECTIONS	129.00	102.00	177.00	73.53	37.21
--- Hazmat defects	829.00	314.00	171.00	-45.54	-79.37
--- Hazmat releases in train accidents	1.00	1.00	.	.	.
--- Cars carrying hazmat in train accidents	186.00	363.00	297.00	-18.18	59.68
--- Hazmat cars damaged/derailed in train accidents	29.00	66.00	43.00	-34.85	48.28
--- Cars releasing hazmat in train accidents	1.00	1.00	0.00	-100.0	-100.0
OPERATING PRACTICES INSPECTIONS	300.00	395.00	358.00	-9.37	19.33
--- Human factor caused accidents	49.00	48.00	57.00	18.75	16.33
--- Accidents on yard track	30.00	31.00	32.00	3.23	6.67
--- Operating practices defects	154.00	305.00	543.00	78.03	252.60
--- Railroad operating/safety rules exceptions 3/	220.00	424.00	347.00	-18.16	57.73
SIGNAL AND TRAIN CONTROL INSPECTIONS	61.00	76.00	65.00	-14.47	6.56
--- Signal caused accidents	.	1.00	1.00	0.00	.
--- Accidents on yard track	.	1.00	.	.	.
--- Signal defects	110.00	112.00	136.00	21.43	23.64
TRACK INSPECTIONS	157.00	262.00	305.00	16.41	94.27
--- Track caused accidents	32.00	31.00	28.00	-9.68	-12.50
--- Accidents on yard track	12.00	19.00	9.00	-52.63	-25.00
--- Track defects	1,042.00	1,879.00	2,158.00	14.85	107.10
MOTIVE POWER AND EQUIPMENT INSPECTIONS	440.00	479.00	494.00	3.13	12.27
--- Motive power/equipment caused accidents	8.00	11.00	9.00	-18.18	12.50
--- Accidents on yard track	2.00	3.00	1.00	-66.67	-50.00
--- Motive power and equipment defects	4,835.00	4,973.00	5,127.00	3.10	6.04
MISCELLANEOUS CAUSED ACCIDENTS	3.00	2.00	4.00	100.00	33.33
Employee hours worked (form 6180-55)	5,309,707.00	5,629,839.00	5,597,316.00	-0.58	5.42
Total train miles (form 6180-55)	7,659,908.00	8,551,673.00	8,390,521.00	-1.88	9.54
Yard switching miles (form 6180-55)	1,057,662.00	1,184,074.00	1,268,228.00	7.11	19.91

National Railroad Passenger Corporation (Amtrak) Summary Statistics

Category	2001	2002	2003	% Change From 2002	% Change From 2001
TOTAL ACCIDENTS/INCIDENTS	1,629.00	1,458.00	1,421.00	-2.54	-12.77
Total fatalities, all accidents/incidents (form 6180-55a)	139.00	126.00	118.00	-6.35	-15.11
Total nonfatal cases	1,527.00	1,484.00	1,253.00	-15.57	-17.94
TOTAL EMPLOYEE ON DUTY CASES	881.00	824.00	733.00	-11.04	-16.80
--- Employee on duty rate per 200K hours worked	4.10	4.18	3.88	-7.16	-5.45
--- Employee on duty deaths	1.00	.	1.00	.	0.00
--- Deaths involving moving on-track equipment	.	.	1.00	.	.
--- Nonfatal cases involving moving on-track equipment	200.00	208.00	153.00	-26.44	-23.50
--- Serious nonfatal conditions 1/	18.00	29.00	24.00	-17.24	33.33
--- Less serious conditions	862.00	795.00	708.00	-10.94	-17.87
--- Cases resulting in days away from work	651.00	611.00	542.00	-11.29	-16.74
--- Days absent from work	34,213.00	34,681.00	40,988.00	18.19	19.80
Rail passenger deaths in train accidents and HRC incidents	1.00	4.00	.	.	.
Rail passenger injuries in train accidents and HRC incidents	114.00	203.00	52.00	-74.38	-54.39
Trespasser deaths	67.00	78.00	64.00	-17.95	-4.48
TRAIN ACCIDENTS (form 6180-54) Excludes HRC	150.00	112.00	113.00	0.89	-24.67
--- Collisions	8.00	4.00	3.00	-25.00	-62.50
--- Derailments	77.00	57.00	46.00	-19.30	-40.26
--- Other accident types	65.00	51.00	64.00	25.49	-1.54
--- Train accident deaths	1.00	4.00	1.00	-75.00	0.00
--- Train accident injuries	151.00	226.00	18.00	-92.04	-88.08

Category	2001	2002	2003	% Change From 2002	% Change From 2001
--- Train accidents per million train miles	3.89	2.82	2.86	1.23	-26.47
--- Train accidents on main line	72.00	60.00	62.00	3.33	-13.89
--- Rate per million train miles 2/	1.97	1.59	1.66	3.79	-16.07
--- Accidents on yard track	72.00	51.00	46.00	-9.80	-36.11
--- Rate per million yard switching train miles	34.87	25.14	22.33	-11.20	-35.97
HIGHWAY-RAIL INCIDENTS (HRC) (form 6180-57)	162.00	142.00	150.00	5.63	-7.41
--- Highway-rail incidents deaths	69.00	42.00	52.00	23.81	-24.64
--- Highway-rail incidents injuries	84.00	93.00	123.00	32.26	46.43
--- Crossings inspected	8.00	2.00	7.00	250.00	-12.50
--- Defects recorded	20.00	15.00	22.00	46.67	10.00
--- Highway-rail incidents per million train miles	4.20	3.58	3.80	5.99	-9.62
TOTAL INSPECTION REPORTS (form 96)	1,816.00	2,166.00	2,047.00	-5.49	12.72
HAZMAT INSPECTIONS	5.00	6.00	6.00	0.00	20.00
--- Hazmat defects	5.00	0.00	0.00	.	-100.0
--- Hazmat releases in train accidents	.	.	.	.	.
--- Cars carrying hazmat in train accidents	0.00	0.00	0.00	.	.
--- Hazmat cars damaged/derailed in train accidents	0.00	0.00	0.00	.	.
--- Cars releasing hazmat in train accidents	0.00	0.00	0.00	.	.
OPERATING PRACTICES INSPECTIONS	1,085.00	1,431.00	1,225.00	-14.40	12.90
--- Human factor caused accidents	33.00	31.00	22.00	-29.03	-33.33
--- Accidents on yard track	24.00	21.00	16.00	-23.81	-33.33
--- Operating practices defects	1,033.00	2,392.00	1,086.00	-54.60	5.13
--- Railroad operating/safety rules exceptions 3/	216.00	435.00	361.00	-17.01	67.13
SIGNAL AND TRAIN CONTROL INSPECTIONS	195.00	198.00	286.00	44.44	46.67
--- Signal caused accidents	1.00	1.00	.	.	.
--- Accidents on yard track	1.00	.	.	.	.
--- Signal defects	261.00	227.00	398.00	75.33	52.49
TRACK INSPECTIONS	420.00	419.00	595.00	42.00	41.67
--- Track caused accidents	65.00	41.00	43.00	4.88	-33.85
--- Accidents on yard track	39.00	21.00	24.00	.	-38.46
--- Track defects	1,005.00	561.00	997.00	77.72	-0.80
MOTIVE POWER AND EQUIPMENT INSPECTIONS	495.00	731.00	553.00	-24.35	11.72
--- Motive power/equipment caused accidents	26.00	17.00	31.00	82.35	19.23
--- Accidents on yard track	5.00	6.00	4.00	-33.33	-20.00
--- Motive power and equipment defects	1,149.00	2,325.00	1,419.00	-38.97	23.50
MISCELLANEOUS CAUSED ACCIDENTS	25.00	22.00	17.00	-22.73	-32.00
Employee hours worked (form 6180-55)	42,956,762.00	39,450,311.00	37,801,336.00	-4.18	-12.00
Total train miles (form 6180-55)	38,575,104.00	39,652,480.00	39,519,448.00	-0.34	2.45
Yard switching miles (form 6180-55)	2,065,104.00	2,028,480.00	2,060,448.00	1.58	-0.23

Norfolk Southern Summary Statistics

Category	2001	2002	2003	% Change From 2002	% Change From 2001
TOTAL ACCIDENTS/INCIDENTS	1,308.00	1,328.00	1,377.00	3.69	5.28
Total fatalities, all accidents/incidents (form 6180-55a)	126.00	126.00	106.00	-15.87	-15.87
Total nonfatal cases	653.00	614.00	661.00	7.65	1.23
TOTAL EMPLOYEE ON DUTY CASES	399.00	386.00	410.00	6.22	2.76
--- Employee on duty rate per 200K hours worked	1.33	1.33	1.40	5.13	5.25
--- Employee on duty deaths	4.00	4.00	1.00	-75.00	-75.00
--- Deaths involving moving on-track equipment	4.00	2.00	.	.	.
--- Nonfatal cases involving moving on-track equipment	52.00	62.00	49.00	-20.97	-5.77
--- Serious nonfatal conditions 1/	26.00	20.00	35.00	75.00	34.62
--- Less serious conditions	369.00	362.00	374.00	3.31	1.36
--- Cases resulting in days away from work	298.00	288.00	310.00	7.64	4.03
--- Days absent from work	49,124.00	44,907.00	46,346.00	3.20	-5.66
Rail passenger deaths in train accidents and HRC incidents	.	.	.	.	.

Category	2001	2002	2003	% Change From 2002	% Change From 2001
Rail passenger injuries in train accidents and HRC incidents	.	.	.	.	.
Trespasser deaths	55.00	63.00	65.00	3.17	18.18
TRAIN ACCIDENTS (form 6180-54) Excludes HRC	239.00	232.00	307.00	32.33	28.45
--- Collisions	22.00	27.00	29.00	7.41	31.82
--- Derailments	192.00	168.00	229.00	36.31	19.27
--- Other accident types	25.00	37.00	49.00	32.43	96.00
--- Train accident deaths	.	1.00	.	.	.
--- Train accident injuries	8.00	10.00	10.00	0.00	25.00
--- Train accidents per million train miles	2.66	2.52	3.30	31.15	24.18
--- Train accidents on main line	65.00	61.00	84.00	37.70	29.23
--- Rate per million train miles 2/	0.85	0.77	1.05	35.71	22.99
--- Accidents on yard track	137.00	122.00	170.00	39.34	24.09
--- Rate per million yard switching train miles	9.96	9.17	13.10	42.88	31.46
HIGHWAY-RAIL INCIDENTS (HRC) (form 6180-57)	507.00	528.00	486.00	-7.95	-4.14
--- Highway-rail incidents deaths	67.00	58.00	40.00	-31.03	-40.30
--- Highway-rail incidents injuries	129.00	96.00	120.00	25.00	-6.98
--- Crossings inspected	444.00	569.00	700.00	23.02	57.66
--- Defects recorded	730.00	964.00	826.00	-14.32	13.15
--- Highway-rail incidents per million train miles	5.64	5.73	5.22	-8.78	-7.33
TOTAL INSPECTION REPORTS (form 96)	7,569.00	7,736.00	8,033.00	3.84	6.13
HAZMAT INSPECTIONS	849.00	750.00	967.00	28.93	13.90
--- Hazmat defects	1,368.00	1,078.00	1,160.00	7.61	-15.20
--- Hazmat releases in train accidents	1.00	6.00	4.00	-33.33	300.00
--- Cars carrying hazmat in train accidents	229.00	328.00	256.00	-21.95	11.79
--- Hazmat cars damaged/derailed in train accidents	27.00	114.00	39.00	-65.79	44.44
--- Cars releasing hazmat in train accidents	1.00	7.00	4.00	-42.86	300.00
OPERATING PRACTICES INSPECTIONS	2,439.00	2,548.00	2,489.00	-2.32	2.05
--- Human factor caused accidents	69.00	75.00	119.00	58.67	72.46
--- Accidents on yard track	46.00	48.00	85.00	77.08	84.78
--- Operating practices defects	10,812.00	2,673.00	4,800.00	79.57	-55.60
--- Railroad operating/safety rules exceptions 3/	683.00	413.00	434.00	5.08	-36.46
SIGNAL AND TRAIN CONTROL INSPECTIONS	745.00	736.00	803.00	9.10	7.79
--- Signal caused accidents	7.00	5.00	4.00	-20.00	-42.86
--- Accidents on yard track	7.00	5.00	3.00	-40.00	-57.14
--- Signal defects	2,028.00	2,004.00	2,217.00	10.63	9.32
TRACK INSPECTIONS	1,668.00	1,754.00	2,284.00	30.22	36.93
--- Track caused accidents	72.00	81.00	99.00	22.22	37.50
--- Accidents on yard track	35.00	42.00	45.00	7.14	28.57
--- Track defects	6,490.00	6,356.00	8,051.00	26.67	24.05
MOTIVE POWER AND EQUIPMENT INSPECTIONS	3,420.00	3,700.00	3,439.00	-7.05	0.56
--- Motive power/equipment caused accidents	51.00	35.00	47.00	34.29	-7.84
--- Accidents on yard track	28.00	13.00	16.00	23.08	-42.86
--- Motive power and equipment defects	34,978.00	33,325.00	29,527.00	-11.40	-15.58
MISCELLANEOUS CAUSED ACCIDENTS	40.00	36.00	38.00	5.56	-5.00
Employee hours worked (form 6180-55)	60,195,279.00	58,167,947.00	58,768,180.00	1.03	-2.37
Total train miles (form 6180-55)	89,950,834.00	92,214,833.00	93,044,745.00	0.90	3.44
Yard switching miles (form 6180-55)	13,749,186.00	13,307,360.00	12,978,158.00	-2.47	-5.61

Union Pacific Summary Statistics

Category	2001	2002	2003	% Change From 2002	% Change From 2001
TOTAL ACCIDENTS/INCIDENTS	3,210.00	2,778.00	2,523.00	-9.18	-21.40
Total fatalities, all accidents/incidents (form 6180-55a)	211.00	221.00	208.00	-5.88	-1.42
Total nonfatal cases	1,877.00	1,566.00	1,344.00	-14.18	-28.40
TOTAL EMPLOYEE ON DUTY CASES	1,464.00	1,159.00	959.00	-17.26	-34.49
--- Employee on duty rate per 200K hours worked	3.01	2.57	2.14	-16.68	-28.87

Category	2001	2002	2003	% Change From 2002	% Change From 2001
--- Employee on duty deaths	2.00	2.00	3.00	50.00	50.00
--- Deaths involving moving on-track equipment	.	2.00	2.00	0.00	.
--- Nonfatal cases involving moving on-track equipment	287.00	190.00	166.00	-12.63	-42.16
--- Serious nonfatal conditions 1/	76.00	51.00	42.00	-17.65	-44.74
--- Less serious conditions	1,386.00	1,106.00	914.00	-17.36	-34.05
--- Cases resulting in days away from work	1,025.00	817.00	675.00	-17.38	-34.15
--- Days absent from work	136,006.00	105,617.00	74,061.00	-29.88	-45.55
Rail passenger deaths in train accidents and HRC incidents	.	.	.	.	.
Rail passenger injuries in train accidents and HRC incidents	.	.	.	.	.
Trespasser deaths	132.00	146.00	134.00	-8.22	1.52
TRAIN ACCIDENTS (form 6180-54) Excludes HRC	896.00	824.00	795.00	-3.52	-11.27
--- Collisions	48.00	52.00	54.00	3.85	12.50
--- Derailments	719.00	648.00	612.00	-5.56	-14.88
--- Other accident types	129.00	124.00	129.00	4.03	0.00
--- Train accident deaths	1.00	1.00	2.00	100.00	100.00
--- Train accident injuries	28.00	29.00	30.00	3.45	7.14
--- Train accidents per million train miles	5.19	4.41	4.18	-5.25	-19.42
--- Train accidents on main line	254.00	256.00	236.00	-7.81	-7.09
--- Rate per million train miles 2/	1.60	1.47	1.35	-8.60	-15.66
--- Accidents on yard track	501.00	468.00	467.00	-0.21	-6.79
--- Rate per million yard switching train miles	37.11	36.44	31.63	-13.20	-14.77
HIGHWAY-RAIL INCIDENTS (HRC) (form 6180-57)	629.00	532.00	491.00	-7.71	-21.94
--- Highway-rail incidents deaths	72.00	69.00	70.00	1.45	-2.78
--- Highway-rail incidents injuries	227.00	208.00	169.00	-18.75	-25.55
--- Crossings inspected	731.00	891.00	985.00	10.55	34.75
--- Defects recorded	1,200.00	1,316.00	1,126.00	-14.44	-6.17
--- Highway-rail incidents per million train miles	3.64	2.85	2.58	-9.36	-29.10
TOTAL INSPECTION REPORTS (form 96)	12,686.00	14,844.00	14,615.00	-1.54	15.21
HAZMAT INSPECTIONS	1,528.00	1,939.00	1,996.00	2.94	30.63
--- Hazmat defects	2,348.00	2,423.00	2,307.00	-4.79	-1.75
--- Hazmat releases in train accidents	7.00	7.00	8.00	14.29	14.29
--- Cars carrying hazmat in train accidents	2,012.00	1,747.00	1,558.00	-10.82	-22.56
--- Hazmat cars damaged/derailed in train accidents	209.00	196.00	233.00	18.88	11.48
--- Cars releasing hazmat in train accidents	11.00	8.00	9.00	12.50	-18.18
OPERATING PRACTICES INSPECTIONS	4,132.00	4,905.00	4,430.00	-9.68	7.21
--- Human factor caused accidents	277.00	289.00	305.00	5.54	10.11
--- Accidents on yard track	189.00	207.00	219.00	5.80	15.87
--- Operating practices defects	3,568.00	5,046.00	2,284.00	-54.74	-35.99
--- Railroad operating/safety rules exceptions 3/	2,790.00	5,762.00	5,625.00	-2.38	101.61
SIGNAL AND TRAIN CONTROL INSPECTIONS	1,189.00	1,334.00	1,376.00	3.15	15.73
--- Signal caused accidents	20.00	28.00	27.00	-3.57	35.00
--- Accidents on yard track	19.00	26.00	26.00	0.00	36.84
--- Signal defects	4,130.00	3,278.00	3,171.00	-3.26	-23.22
TRACK INSPECTIONS	3,054.00	3,788.00	4,303.00	13.60	40.90
--- Track caused accidents	372.00	293.00	260.00	-11.26	-30.11
--- Accidents on yard track	217.00	164.00	141.00	-14.02	-35.02
--- Track defects	21,986.00	25,196.00	31,864.00	26.46	44.93
MOTIVE POWER AND EQUIPMENT INSPECTIONS	4,571.00	5,410.00	4,952.00	-8.47	8.34
--- Motive power/equipment caused accidents	112.00	117.00	95.00	-18.80	-15.18
--- Accidents on yard track	30.00	28.00	22.00	-21.43	-26.67
--- Motive power and equipment defects	38,804.00	40,205.00	35,532.00	-11.62	-8.43
MISCELLANEOUS CAUSED ACCIDENTS	115.00	97.00	108.00	11.34	-6.09
Employee hours worked (form 6180-55)	97,315,703.00	90,249,090.00	89,623,306.00	-0.69	-7.90
Total train miles (form 6180-55)	172,712,098.00	186,750,216.00	190,164,939.00	1.83	10.11
Yard switching miles (form 6180-55)	13,500,792.00	12,844,326.00	14,765,910.00	14.96	9.37