assessment for such year;" is corrected to read "(1) In a form and manner specified by the Secretary, that the EP more frequently than is required to qualify for or maintain board certification status, participates in the MOCP for a year and successfully completes a qualified MOCP practice assessment for such year;".

c. Third column, first bulleted paragraph, line 20, the phrase "her or participate" is corrected to read "EHR or participate".

30. On page 40200, third column, fifth bulleted paragraph that begins with the phrase "The board has signed" is corrected to read as follows:

"• The board has signed documentation from the EP that the EP wishes to have their information released to CMS;

• Information from the experience of care survey;".

31. On page 40207, third column, before the third full paragraph, in the section heading, line 1, the section number "(2)" is corrected to read "(ii)".

32. On page 40217, first column, fifth full paragraph, lines 8 through 10, the phrase "independent determination from the CBIC's recommendation to terminate" is corrected to read "independent recommendation whether to terminate".

33. On page 40225, lower third of the page, third column, before the last paragraph, in the section heading, the section number "3." is corrected to read "2.".

34. On page 40243—

a. Second column—

(1) Second full paragraph, lines 5 through 7, the phrase "to physicians or other practitioners (as defined by the Secretary)" is corrected to read "to physicians, other practitioners (as defined by the Secretary), or hospitals".

(2) Last paragraph—

(a) Lines 2 and 3, the phrase "physicians and other providers" is corrected to read "physicians, other practitioners, and hospitals".

(b) Lines 3 and 4, the phrase, "allow physicians to continue" is corrected to read "allow physicians, other practitioners, and hospitals to continue".

b. Third column, first partial paragraph, lines 4 through 6, the phrase, "continued access to OTS items for beneficiaries while being seen in their physician's office." is corrected to read "access to these items for beneficiaries when these items are furnished by physicians, other practitioners, and hospitals to their own patients."

35. On page 40244, second column, first full paragraph—

a. Line 5, the phrase "switching beneficiaries" is corrected to read "incentivizing beneficiaries to switch".

b. Line 19, the phrase, "do require beneficiaries" is corrected to "do not require beneficiaries".

B. Corrections to the Regulations Text

1. On page 40259, second column, first partial paragraph § 414.904(d)(3)(iii)(A)—

a. Line 3, the phrase "quarters; immediately preceding" is corrected to read "quarters, immediately preceding".

b. Last line, the phrase "apply; and," is corrected to read "apply; and".

IV. Waiver of 60-Day Comment Period

We ordinarily permit a 60-day comment period on a notice of proposed rulemaking in the **Federal Register**, as provided in section 1871(b)(1) of the Act. However, this period may be shortened, as provided under section 1871(b)(2)(C) of the Act, when the Secretary finds good cause that a 60-day comment period would be impracticable, unnecessary, or contrary to the public interest and incorporates a statement of the finding and its reasons in the rule issued.

The changes made by this correction notice do not constitute agency rulemaking, and therefore the 60-day comment period does not apply. This correction notice merely corrects typographical and technical errors in the CY 2011 Physician Fee Schedule proposed rule and does not make substantive changes to the CY 2011 Physician Fee Schedule proposed rule appearing in the July 13, 2010 **Federal Register** that would require additional time on which to comment. Instead, this correction notice is intended to ensure the accuracy of the CY 2011 Physician Fee Schedule proposed rule. To the extent that the 60-day comment period does apply, we find good cause to shorten the period for the reasons set forth above.

(Catalog of Federal Domestic Assistance Program No. 93.773, Medicare—Hospital Insurance; and Program No. 93.774, Medicare—Supplementary Medical Insurance Program)

Dated: August 23, 2010.

Dawn L. Smalls,

Executive Secretary to the Department.

[FR Doc. 2010–21255 Filed 8–23–10; 4:15 pm]

BILLING CODE 4120–01–P

DEPARTMENT OF TRANSPORTATION

Federal Railroad Administration

49 CFR Part 213

[Docket No. FRA–2009–0007, Notice No. 1]

RIN 2130–AC01

Track Safety Standards; Concrete Crossties

AGENCY: Federal Railroad Administration (FRA), Department of Transportation (DOT).

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: FRA is proposing to amend the Federal Track Safety Standards to promote the safety of railroad operations over track constructed with concrete crossties. In particular, FRA is proposing specific requirements for effective concrete crossties, for rail fastening systems connected to concrete crossties, and for automated inspections of track constructed with concrete crossties. In addition, FRA is proposing to remove the provision on preemptive effect.

DATES: Written comments must be received by October 12, 2010. Comments received after that date will be considered to the extent possible without incurring additional delay or expense.

FRA anticipates being able to resolve this rulemaking without a public, oral hearing. However if FRA receives a specific request for a public, oral hearing prior to September 27, 2010, one will be scheduled and FRA will publish a supplemental notice in the **Federal Register** to inform interested parties of the date, time, and location of any such hearing.

ADDRESSES: *Comments:* Comments related to this Docket No. FRA–2009–0007, Notice No. 1 may be submitted by any of the following methods:

• *Federal eRulemaking Portal:* Go to *http://www.Regulations.gov.* Follow the online instructions for submitting comments.

• *Mail:* Docket Management Facility, U.S. Department of Transportation, Room W12–140, 1200 New Jersey Avenue, SE., Washington, DC 20590–0001.

• *Hand Delivery:* Docket Management Facility, U.S. Department of Transportation, West Building, Ground floor, Room W12–140, 1200 New Jersey Avenue, SE., Washington, DC, between 9 a.m. and 5 p.m. ET, Monday through Friday, except Federal holidays.

• *Fax:* 202–493–2251.

Instructions: All submissions must include the agency name and docket

number or Regulatory Identification Number (RIN) for this rulemaking. Please note that all comments received will be posted without change to *http://www.Regulations.gov,* including any personal information provided. *Please see* the discussion under the Privacy Act heading in the **SUPPLEMENTARY INFORMATION** section of this document.

Docket: For access to the docket to read background documents or comments received, go to *http://www.Regulations.gov* at any time or visit the Docket Management Facility, U.S. Department of Transportation, West Building, Ground floor, Room W12–140, 1200 New Jersey Avenue, SE., Washington, DC between 9 a.m. and 5 p.m. ET, Monday through Friday, except Federal holidays.

FOR FURTHER INFORMATION CONTACT: Kenneth Rusk, Staff Director, Office of Railroad Safety, FRA, 1200 New Jersey Avenue, SE., Washington, DC 20590 (telephone: (202) 493–6236); or Sarah Grimmer Yurasko, Trial Attorney, Office of Chief Counsel, FRA, 1200 New Jersey Avenue, SE., Washington, DC 20590 (telephone: (202) 493–6390).

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I. Concrete Crossties

A. Derailment in 2005 Near Home Valley, Washington

On April 3, 2005, a National Railroad Passenger Corporation (Amtrak) passenger train traveling at 60 miles per hour on the BNSF Railway Company's line through the Columbia River Gorge (near Home Valley, Washington) derailed on a 3-degree curve. According to the National Transportation Safety Board (NTSB), 30 people sustained injuries. Property damage totaled about $854,000. See NTSB/RAB–06–03. According to the NTSB, the accident was caused in part by excessive concrete crosstie abrasion, which allowed the outer rail to rotate outward and create a wide gage track condition. This accident illustrated the potential for track failure with subsequent derailment under conditions that might not be readily evident in a normal visual track inspection. Conditions giving rise to this risk may include concrete tie rail seat abrasion, track curvature, and operation of trains through curves at speeds leading to unbalance (which is more typical of passenger operations). Subsequently, this accident also called attention to the need for clearer and more appropriate requirements for concrete ties, in general. This proposed rule addresses this complex of issues as further described below.

B. General Factual Background on Concrete Crossties

Traditionally, crossties have been made of wood, but due to improved continuous welded rail processes, elastic fastener technology, and concrete prestressing techniques, the use of concrete crossties is widespread and growing. On major railroads in the United States, concrete crossties make up an estimated 20 percent of all installed crossties. A major advantage of concrete crossties is that they transmit imposed wheel loads better than traditional wood crossties, although they are susceptible to stress from high-impact loads. Another advantage of concrete crossties over wood ties is that temperature change has little effect on concrete's durability, and concrete ties often provide better resistance from track buckling.

There are, however, situations that can negatively impact a concrete crosstie's effectiveness. For example, in wet climates, eccentric wheel loads and noncompliant track geometry can cause high-concentrated non-uniform dynamic loading, usually toward the field-side of the concrete rail base. This highly-concentrated non-uniform dynamic loading puts stress on the crosstie that can lead to the development of a fracture. Additionally, repeated wheel loading rapidly accelerates rail seat deterioration where the padding material fails and the rail steel is in direct contact with the concrete. The use of automated technology can help inspectors ensure rail safety on track constructed of concrete crossties. While wood and concrete crossties differ structurally, they both must still support the track in compliance with the Federal Track Safety Standards (49 CFR part 213).

Although timber crossties are more prevalent throughout track in the United States, the use of concrete crossties in the railroad industry, either experimentally or under revenue service, dates back to 1893. The first railroad to use concrete crossties was the Philadelphia and Reading Company in Germantown, PA.[1] In 1961, the Association of American Railroads (AAR)[2] carried out comprehensive laboratory and field tests on prestressed concrete crosstie performance. Replacing timber crossties with concrete crossties on a one-to-one basis at 19½ inch spacing proved acceptable based on engineering performance, but was uneconomical.

Increasing crosstie spacing from the conventional 20 inches to 30 inches increased the rail bending stress and the load that each crosstie transmitted to the ballast; however, the increased rail bending stress was within design limits. Further, by increasing the crosstie base to 12 inches, the pressure transmitted from crosstie to ballast was the same as for timber crossties. Thus, by increasing the spacing of the crossties while maintaining rail, crosstie, and ballast stress at acceptable levels, the initial research showed that fewer concrete crossties than timber crossties could be used, making the application of concrete crossties an economical alternative to timber crossties.

Early research efforts in the 1960s and 1970s were focused on the strength characteristics of concrete crossties, *i.e.,* bending at the top center and at the bottom of the crosstie under the rail seat or the rail-crosstie interface, and material optimization such as aggregate and prestressing tendons and concrete failure at the rail-crosstie and ballast-crosstie interface. Renewed efforts regarding the use of concrete crossties in the United States in the 1970s were led by a major research effort to optimize crosstie design at the Portland Cement Association Laboratories (PCA).

The PCA's research included the use of various shapes, sizes, and materials to develop the most economically desirable concrete crosstie possible. Extensive use of concrete crossties by

[1] J.W. Weber, "Concrete crossties in the United States," International Journal Prestressed Concrete Vol. 14 No. 1, February 1969.

[2] "Prestressed concrete crosstie investigation," AAR, Engineering research division, Report No. ER–20 November 1961; and G.M. Magee and E.J. Ruble, "Service Test on Prestressed Concrete Crossties," Railway Track and Structures, September 1960.

railroads all over the world since the 1970s indicates that concrete crossties are an acceptable design alternative for use in modern track. Test sections on various railroads were set up in the 1970s to evaluate the performance of concrete crossties. Such installations were on the Alaska Railroad, Chessie System, The Atchison, Topeka and Santa Fe Railway Company, the Norfolk and Western Railway Company, and the Facility for Accelerated Service Testing (FAST) in Pueblo, Colorado.[3]

During the 1970s, PCA addressed several of the initial concrete design problems, including quality control issues and abrasion. Abrasion, or failure of the concrete surface between the rail and crossties, became apparent when large sections of track were converted to concrete crossties, especially on high-curvature and high-tonnage territories. This phenomenon, commonly termed "rail seat abrasion," was noted in one form or another on four major railroads in North America (or their predecessors): Canadian Pacific Railway (CP); Canadian National Railway (CN); BNSF; and Union Pacific Railroad Company (UP).[4] CN's concrete crosstie program started in 1976, and researchers noted that rail seat abrasion was generally less than 0.2 inches by 1991. In a few cases, particularly on curved track, rail seat abrasion of as much as 1 inch has been noted. In the majority of cases, especially on tangent or light curvature track, rail seat abrasion was uniform across the rail seat. BNSF started its program in 1986 and noted the same pattern of abrasion as CN with most of the abrasion occurring on curves. At CP, rail seat abrasion was present on 5-degree curves, and CP used a bonded pad to reduce rail seat abrasion. CP's experience indicated that evidence of abrasion appeared shortly after failure of the bonded pad. At other locations where test sites were set up under less severe environments, concrete crossties were installed with no apparent sign of rail seat abrasion.

Mechanisms that lead to rail seat abrasion include the development of abrasive slurry between the rail pad and the concrete crosstie. Slurry is made up of various materials including dust particles, fine material from the breakdown of the ballast particles, grinding debris from rail grinders, and sand from locomotive sanding or blown by the wind. This slurry, driven by the rail movement, abrades the concrete surface and leaves the concrete aggregate exposed, generating concentrated forces on the rail pads. This abrasion process is accelerated once the pad is substantially degraded and the rail base makes direct contact with the concrete crosstie.

Recently, a new form of rail seat abrasion, which is believed to be attributable to excessive compression forces on the rail seat area, was noted on high-curvature territory. The wear patterns in these locations have a triangular shape when viewed from the side of the crosstie. These wear patterns are similar in shape to the rail seat pressure distribution calculated when a vertical load and overturning moment are applied. The high vertical and lateral forces applied to the high rail by a curving vehicle provide such a vertical load and an overturning moment that loads the rail base unevenly.

Anecdotal evidence indicates that once this triangular shape wear pattern develops and moves beyond the two-thirds point of the rail seat, as referenced from the field side, a high negative cant is created, leading to high compressive forces on the field side. These forces are high even in the absence of an overturning moment since the rail is now bearing on only a fraction of the original bearing area. Further, it is believed that once the rail seat wears to this triangular shape, the degradation rate is accelerated due to the high compressive forces.

It is apparent that at this time, elimination of rail seat abrasion in existing concrete crossties would be difficult in areas with severe operating conditions. Mitigation of the problem on new or existing crossties is required. For new crosstie construction, it is possible to focus research efforts on strengthening the rail seat area with use of high-strength concrete or with embedding a steel plate at the time new crossties are cast. Both options have a high probability of success, but could render concrete crossties uneconomical.

Modern concrete crossties are designed to accept the stresses imposed by irregular rail head geometry and loss, excessive wheel loading caused by wheel irregularities (out of round), excessive unbalance speed, and track geometry defects. In developing the proposed regulatory text, FRA considered the worst combinations of conditions, which can cause excessive impact and eccentric loading stresses that would increase failure rates. FRA also considered other measures in the proposed requirements concerning loss of toeload and longitudinal and lateral restraint, in addition to improper rail cant.

C. Statutory Mandate To Conduct This Rulemaking

On October 16, 2008, the Rail Safety Improvement Act of 2008 (Pub. L. 110–432, Division A) ("RSIA") was enacted. Section 403(d) of RSIA states that "[n]ot later than 18 months after the date of enactment of this Act, the Secretary shall promulgate regulations for concrete cross ties. In developing the regulations for class 1 through 5 track, the Secretary may address, as appropriate—(1) limits for rail seat abrasion; (2) concrete cross tie pad wear limits; (3) missing or broken rail fasteners; (4) loss of appropriate toeload pressure; (5) improper fastener configurations; and (6) excessive lateral rail movement." The Secretary delegated his responsibilities under RSIA to the Administrator of FRA. See 49 CFR 1.49(oo).

Regulations governing the use of concrete crossties currently address only high-speed rail operations (Class 6 track and above).[5] For track Classes 1–5 (the lower speed classes of track), concrete crossties have been treated, from the regulatory aspect, as timber crossties. While this approach works well for the major concerns with concrete crossties, it does not address the critical issue of rail seat abrasion, which this NPRM proposes to address. Also not addressed in the current regulation is the longitudinal rail restraint provided by concrete crossties, which is totally different than the restraint provided by timber crossties. This NPRM addresses these shortcomings and proposes new methodologies for inspection.

II. Overview of FRA's Railroad Safety Advisory Committee (RSAC)

In March 1996, FRA established RSAC, which provides a forum for developing consensus recommendations to the Administrator of FRA on rulemakings and other safety program issues. RSAC includes representation from all of the agency's major stakeholders, including railroads, labor organizations, suppliers and manufacturers, and other interested parties. An alphabetical list of RSAC members follows:

AAR;
American Association of Private Railroad Car Owners;
American Association of State Highway and Transportation Officials;
American Chemistry Council;
American Petrochemical Institute;
American Public Transportation Association (APTA);

[3] T.Y. Lin, "*Design of Prestressed Concrete Structures*," Third Edition, John Wiley & Sons.

[4] Albert J. Reinschmidt, "Rail-seat abrasion: Causes and the search for the cure," Railway Track and Structures, July 1991.

[5] *See* 49 CFR 213.335(d).

American Short Line and Regional Railroad Association (ASLRRA);
American Train Dispatchers Association;
Amtrak;
Association of Railway Museums;
Association of State Rail Safety Managers (ASRSM);
Brotherhood of Locomotive Engineers and Trainmen (BLET);
Brotherhood of Maintenance of Way Employees Division (BMWED);
Brotherhood of Railroad Signalmen (BRS);
Chlorine Institute;
Federal Transit Administration;*
Fertilizer Institute;
High Speed Ground Transportation Association;
Institute of Makers of Explosives;
International Association of Machinists and Aerospace Workers;
International Brotherhood of Electrical Workers;
Labor Council for Latin American Advancement;*
League of Railway Industry Women;*
National Association of Railroad Passengers;
National Association of Railway Business Women;*
National Conference of Firemen & Oilers;
National Railroad Construction and Maintenance Association;
NTSB;*
Railway Supply Institute;
Safe Travel America;
Secretaria de Comunicaciones y Transporte;*
Sheet Metal Workers International Association;
Tourist Railway Association Inc.;
Transport Canada;*
Transport Workers Union of America;
Transportation Communications International Union/BRC;
Transportation Security Administration; and
United Transportation Union (UTU).

**Indicates associate, non-voting membership.*

When appropriate, FRA assigns a task to RSAC, and after consideration and debate, RSAC may accept or reject the task. If the task is accepted, RSAC establishes a working group that possesses the appropriate expertise and representation of interests to develop recommendations to FRA for action on the task. These recommendations are developed by consensus. A working group may establish one or more task forces to develop facts and options on a particular aspect of a given task. The task force then provides that information to the working group for consideration.

If a working group comes to a unanimous consensus on recommendations for action, the package is presented to the full RSAC for a vote. If the proposal is accepted by a simple majority of RSAC, the proposal is formally recommended to FRA. FRA then determines what action to take on the recommendation. Because FRA staff members play an active role at the working group level in discussing the issues and options and in drafting the language of the consensus proposal, FRA is often favorably inclined toward the RSAC recommendation.

However, FRA is in no way bound to follow the recommendation, and the agency exercises its independent judgment on whether the recommended rule achieves the agency's regulatory goals, is soundly supported, and is in accordance with policy and legal requirements. Often, FRA varies in some respects from the RSAC recommendation in developing the actual regulatory proposal or final rule. Any such variations would be noted and explained in the rulemaking document issued by FRA. If the working group or RSAC is unable to reach consensus on recommendations for action, FRA moves ahead to resolve the issue through traditional rulemaking proceedings.

III. RSAC Track Safety Standards Working Group

The Track Safety Standards Working Group ("Working Group") was formed on February 22, 2006. On October 27, 2007, the Working Group formed two subcommittees: The Rail Integrity Task Force ("RITF") and the Concrete Crosstie Task Force ("CCTF"). Principally in response to NTSB recommendation R–06–19,[6] the task statement description for the CCTF was to consider improvements in the Track Safety Standards related to fastening of rail to concrete crossties. The newly formed CCTF was directed to do the following: (1) Provide background information regarding the amount and use of concrete crossties in the U.S. rail network; (2) review minimum safety requirements in the Federal Track Safety Standards for crossties at 49 CFR 213.109 and 213.335, as well as relevant American Railway Engineering and Maintenance-of-Way Association (AREMA) concrete construction specifications; (3) understand the science (mechanical and compressive forces) of rail seat failure on concrete ties; (4) develop a performance specification for all types of crosstie material for FRA Class 2 through 5 main line track; (5) develop specifications for missing or broken concrete fastener and crosstie track structure components and/or establish wear limits for rail seat deterioration and rail fastener integrity; and (6) develop manual and automated methods to detect rail seat failure on concrete ties.

The CCTF met on November 26–27, 2007; February 13–14, 2008; April 16–17, 2008; July 9–10, 2008; and November 19–20, 2008. The CCTF's findings were reported to the Working Group on November 19, 2008. The Working Group reached a consensus on the majority of the CCTF's work and forwarded a proposal to RSAC on December 10, 2008. RSAC voted to approve the Working Group's recommended text, which is the basis of this NPRM.

In addition to FRA staff, the members of the Working Group include the following:

AAR, including members from BNSF, CN, CP, CSX Transportation, Inc., The Kansas City Southern Railway Company, Norfolk Southern Railway Company, and UP;
Amtrak;
APTA, including members from Port Authority Trans-Hudson Corporation, LTK Engineering Services, Northeast Illinois Regional Commuter Railroad Corporation (Metra), and Peninsula Corridor Joint Powers Board (Caltrain);
ASLRRA (representing short line and regional railroads);
BLET;
BMWED;
BRS;
Transportation Technology Center, Inc.; and
UTU.

Staff from the Department of Transportation's John A. Volpe National Transportation Systems Center attended all of the meetings and contributed to the technical discussions. In addition, NTSB staff attended all of the meetings and contributed to the discussions as well.

When appropriate, FRA assigns a task to RSAC, and after consideration and debate, RSAC may accept or reject the task. If the task is accepted, RSAC establishes a working group that possesses the appropriate expertise and representation of interests to develop recommendations to FRA for action on

[6] NTSB recommended that FRA "[e]xtend[,] to all classes of track[,] safety standards for concrete crossties that address at a minimum the following: limits for rail seat abrasion, concrete crosstie pad wear limits, missing or broken rail fasteners, loss of appropriate toeload pressure, improper fastener configurations, and excessive lateral rail movement." NTSB Safety Recommendation R–06–19, dated October 25, 2006.

the task. These recommendations are developed by consensus. A working group may establish one or more task forces to develop facts and options on a particular aspect of a given task. The task force then provides that information to the working group for consideration. If a working group comes to unanimous consensus on recommendations for action, the package is presented to the full RSAC for a vote. If the proposal is accepted by a simple majority of RSAC, the proposal is formally recommended to FRA. FRA then determines what action to take on the recommendation. Because FRA staff plays an active role at the working group level in discussing the issues and options and in drafting the language of the consensus proposal, FRA is often favorably inclined toward the RSAC recommendation.

However, FRA is in no way bound to follow the recommendation, and the agency exercises its independent judgment on whether the recommended rule achieves the agency's regulatory goal, is soundly supported, and is in accordance with policy and legal requirements. Often, FRA varies in some respects from the RSAC recommendation in developing the actual regulatory proposal or final rule. Any such variations would be noted and explained in the rulemaking document issued by FRA. If the working group or RSAC is unable to reach consensus on recommendations for action, FRA moves ahead to resolve the issue through traditional rulemaking proceedings.

FRA has worked closely with RSAC in developing its recommendations and believes that the RSAC has effectively addressed concerns with regard to the safety of concrete crossties. FRA has greatly benefited from the open, informed exchange of information during the meetings. There is a general consensus among railroads, rail labor organizations, State safety managers, and FRA concerning the primary principles that FRA sets forth in this NPRM. FRA believes that the expertise possessed by the RSAC representatives enhances the value of the recommendations, and FRA has made every effort to incorporate them in this proposed rule.

The Working Group was unable to reach consensus on one item that FRA has elected to include in this NPRM. The Working Group could not reach consensus on a single technology or methodology to measure the rail seat deterioration on concrete ties. Also, the group debated over whether or not the revised standards should contain language to accommodate the present technology. Encouraging public comment on this particular issue, FRA is proposing at 49 CFR 213.234(e) that the automated inspection measurement system must be capable of measuring and processing rail cant requirements that specify the following: (1) An accuracy angle, in degrees, to within ½ of a degree; (2) a distance-based sampling interval not exceeding two feet; and (3) calibration procedures and parameters assigned to the system, which assure that measured and recorded values accurately represent rail cant.

IV. FRA's Approach to Concrete Crossties in This NPRM

In this NPRM, FRA is proposing standards for the maintenance of concrete crossties in Classes 1 through 5 track. Specifically, FRA is proposing requirements to establish limits for rail seat abrasion, concrete crosstie pad wear limits, missing or broken rail fasteners, loss of appropriate toeload pressure, improper faster configuration, and excessive lateral rail movement. FRA is also proposing to add a section requiring the automated inspection of track constructed with concrete crossties.

In developing this NPRM, FRA relied heavily upon the work of the CCTF. The mission statement of the CCTF was to consider available scientific and empirical data or direct new studies to evaluate the concrete crosstie rail seat deterioration phenomenon and, through consensus, propose best practices, inspection criteria, or standards to assure concrete crosstie safety. The members of the CCTF worked together to develop definitions and terminology as required and to disseminate pertinent information and safety concerns.

The Federal Track Safety Standards prescribe minimum track geometry and structure requirements for specific railroad track conditions existing in isolation. Railroads are expected to maintain higher safety standards, and are not precluded from prescribing additional or more stringent requirements.

Currently, crossties are evaluated individually by the definitional and functional criteria set forth in the regulations. As promulgated in 49 CFR 213.109, crosstie "effectiveness" is naturally subjective, short of failure of the ties, and requires good judgment in the application and interpretation of the standard. The soundness of a crosstie is demonstrated when a 39-foot track segment maintains safe track geometry and structurally supports the imposed wheel loads with minimal deviation. Key to the track segment lateral, longitudinal, and vertical support is a strong track modulus, which is a measure of the vertical stiffness of the rail foundation, sustained by a superior superstructure (including rails, crossties, fasteners, etc.) and high-quality ballast characteristics that transmit both dynamic and thermal loads to the subgrade. Proper drainage free from excess moisture presence is an apparent and crucial factor in providing structural support.

A. Rail Cant

The Working Group discussed the concept of rail cant, but determined not to regulate this track geometric condition. The rail cant angle is described by AREMA as a degree of slope (cant) designed toward the centerline of the crosstie. FRA does not specifically use the term "rail cant" in any of its track regulations, including the standards in subpart G of part 213, which apply to track used for the operation of trains at greater than 90 miles per hour (mph) for passenger equipment and at greater than 80 mph for freight equipment (track Classes 6 and higher). However, "rail cant" is widely accepted and understood in the rail industry, and FRA has decided to use the term in the proposed rule. "Rail cant deviation" refers to the inward or outward angle made by the rail when the rail seat pad material deteriorates to a point that exposes the rail base to the concrete.

Automated technology that measures rail cant deviations exceeding proper design criteria is extremely efficient in identifying problems with the rail/crosstie interface such as rail seat abrasion (deterioration), ineffective fasteners, crosstie plate cutting (wood), missing or worn crosstie pads, and rail/plate misalignment. The deterioration or abrasion is the result of a compressive load and/or mechanical effects of deterioration from repetitious concentrated wheel loading, which typically develops a triangular void on the field side of the rail and allows the rail to tilt or roll outward under load, increasing gage widening and possible rail rollover relationships.

The CCTF could not reach consensus on a single technology or methodology to measure the rail cant angle when the concrete crosstie rail seat deteriorates. Also, the CCTF could not reach consensus on whether the revised standards should contain language to accommodate the present technology. The CCTF therefore recommended that FRA and the industry continue evaluating the possibility of developing rail seat deterioration standards for

concrete crossties for broader application within the industry.

An improper rail cant angle may be an indication of rail seat deterioration, which can be detected by a variety of methods. One method currently used is a rail profile measurement system to measure rail cant angle. Other, perhaps less costly, methods have not been fully developed. CCTF members chose not to be confined to one measurement system technology when others were available to select from in the marketplace. FRA welcomes public comment regarding the feasibility of technology as an alternative inspection standard or as an additional inspection method for the discovery and remediation of rail cant.

FRA proposes the text that it initially presented to the CCTF at 49 CFR 213.234(e) and welcomes public comment regarding the issue of measuring rail cant. FRA proposes that the automated inspection measurement system must be capable of measuring and processing rail cant requirements that specify the following: (1) An accuracy angle, in degrees, to within ½ of a degree; (2) a distance-based sampling interval not exceeding two feet; and (3) calibration procedures and parameters assigned to the system, which assure that measured and recorded values accurately represent rail cant. FRA is not proposing to mandate the use of a particular technology, rather that the technology selected by the track owner be capable of measuring and processing the rail cant requirements specified in 49 CFR 213.234(e).

B. Automated Inspections

Current inspections of crossties and fasteners rely heavily on visual inspections by track inspectors, whose knowledge is based on varying degrees of experience and training. The subjective nature of those inspections can sometimes create inconsistent determinations regarding the ability of individual crossties and fasteners to support and restrain track geometry. Concrete crossties may not always exhibit strong indications of rail seat deterioration. Rail seat deterioration is often difficult to identify even while conducting a walking visual inspection. Combined with excessive wheel loading and combinations of compliant but irregular geometry,[7] a group of concrete crossties remaining in track for an extended period of time may cause rail seat deterioration to develop rapidly. When a train applies an abnormally high lateral load to a section of track that exhibits rail seat deterioration, the result can be a wide gage or rail rollover derailment with the inherent risk of injury to railroad personnel and passengers, and damage to property.

[7] By "compliant but irregular geometry," FRA notes that track geometry can become irregular when multiple geometry measurements (gage, profile, or alinement) near the compliance limits. This combination of geometry conditions can cause irregular geometry that, when coupled with excessive wheel loading, can cause the rapid development of rail seat deterioration.

V. Section-by-Section Analysis

Section 213.2 Preemptive Effect

FRA proposes to remove this section from 49 CFR part 213. This section was prescribed in 1998 and has become outdated and, therefore, misleading because it does not reflect post-1998 amendments to 49 U.S.C. 20106. 63 FR 34029, June 22, 1998; Sec. 1710(c), Public Law 107–296, 116 Stat. 2319; Sec. 1528, Public Law 110–53, 121 Stat. 453. Although FRA considered updating this regulatory section, FRA now believes that the section is unnecessary because 49 U.S.C. 20106 sufficiently addresses the preemptive effect of part 213. In other words, providing a separate Federal regulatory provision concerning the proposed regulation's preemptive effect is duplicative of 49 U.S.C. 20106 and, therefore, unnecessary.

Section 213.109 Crossties

FRA proposes to amend this section to reflect recommendations made by the CCTF and adopted by RSAC. After discussion and review of concrete crosstie requirements in the higher speed subpart (subpart G of the Track Safety Standards), the CCTF concluded that performance specifications for concrete crossties are needed in the lower-speed standards. Specifically, requirements are needed to establish limits for rail seat abrasion, concrete crosstie pad wear limits, missing or broken rail fasteners, loss of appropriate toeload pressure, improper fastener configuration, and excessive lateral rail movement. The CCTF reviewed the method and manner of manual and automated inspection methods and technology to abate track-caused reportable derailments. FRA is proposing to revise this section to clarify the type of crosstie that will fulfill the requirements of paragraph (b) and to include requirements specific to concrete crossties.

Paragraph (b). FRA is proposing to clarify that only nondefective crossties may be counted to fulfill the requirements of the paragraph. Nondefective crossties are defined in proposed paragraphs (c) and (d). FRA is proposing to make other minor grammatical corrections to this paragraph, including moving the table of minimum number of crossties from paragraph (d) to proposed paragraph (b)(4).

Paragraph (c). FRA is proposing to state that this paragraph is specific to crossties other than concrete crossties.

Paragraph (d). FRA is proposing to move the existing table of minimum number of crossties from this paragraph, to proposed paragraph (b)(4). FRA is proposing to substitute language that delineates the requirements related to concrete crossties.

Paragraph (d)(1). FRA is proposing that, as with non-concrete crossties, concrete crossties counted to fulfill the requirements of proposed paragraph (b)(4) must not be broken through or deteriorated to the extent that prestressing material is visible. Crossties must not be so deteriorated that the prestressing material has visibly separated from, or visibly lost bond with, the concrete, resulting either in the crosstie's partial break-up, or in cracks that expose prestressing material due to spalls or chips, or in broken-out areas exposing prestressed material. Currently, metal reinforcing bars are used as the prestressing material in concrete crossties. FRA is proposing to use the term "prestressing material" in lieu of "metal reinforcing bars" to allow for future technological advances.

Crosstie failure is exhibited in three distinct ways: Stress induced (breaks, cracks); mechanical (abrasion); or chemical decomposition. Breaks, cracking, mechanical abrasion, or chemical reaction in small or large degrees compromise the crosstie's ability to maintain the rails in proper gage, alignment, and track surface.

There is distinction between "broken through" and "deteriorated to the extent that prestressing material is visible." Concrete crossties are manufactured in two basic designs: Twin-block and mono-block. Twin-block crossties are designed with two sections of concrete connected by exposed metal rods. A mono-block crosstie is similar in dimension to a timber or wood crosstie and contains prestress metal strands embedded into the concrete. The metal reinforcing strands in the concrete are observed at the ends of the crosstie for proper tension position. Prestressed reinforced concrete, including prestressed concrete ties, is made by stressing the reinforcing bar in a mold, then pouring cement concrete over the reinforcing bar in the mold. After the concrete cures, the tension on the reinforcing bar is released, and the ends of the reinforcing bar are trimmed, if appropriate for the use. The reinforcing bar remains in tension against the

concrete, which is very strong in compression. This allows the prestressed concrete to withstand both compressive and tensile loads. If the concrete spalls, or if the reinforcing bar is otherwise allowed to come out of contact with the concrete, then the reinforcing bar is no longer in tension, and the once prestressed concrete can no longer withstand tensile loads, and it will fail very rapidly in service, such as in a concrete tie.

FRA notes that prestressing material can be exposed in a concrete crosstie in a crack, but it can also be exposed on the side of the tie. When prestressing material becomes exposed on the side of the tie, the reinforcing bar is no longer in tension, the prestressed concrete can no longer withstand the tensile loads, and therefore a concrete crosstie can structurally fail.

The compressive strength of the concrete material and the amount of prestress applied in the manufacturing process provide the strength and stiffness necessary to adequately support and distribute wheel loads to the subgrade. The reinforcing metal strands/wires encased in concrete hold the crosstie together and provide tensile strength. However, significant cracking or discernible deterioration exposure of the reinforcing strands to water and oxygen produces loss of the prestress force through corrosion, concrete deterioration, and poor bonding. Loss of the prestress force renders the crosstie susceptible to structural failure and as a consequence, stability failure relating to track geometry noncompliance.

During routine inspections, spalls, chips, cracks, and similar breaks are easily visible. However, the compression of prestressed concrete crossties may close cracks as they occur, making them difficult to observe. Even such closed cracks probably weaken the crossties. Breaks or cracks are divided into three general conditions: Longitudinal; center; and rail seat. Longitudinal cracks are horizontal through the crosstie and extend parallel to its length. They are initiated by high impacts on one or both sides of the rail bearing inserts.

Crosstie center cracks are vertical cracks extending transversely or across the crosstie. These cracks are unusual and are the result of high negative bending movement (centerbound), originating at the crosstie top and extend to the bottom. Generally, the condition is progressive, and adjacent crossties may be affected. Rail seat cracks are vertical cracks that are not easily visible. They usually extend from the bottom of the crosstie on one or both sides of the crosstie and are often hard to detect. It is possible for a crosstie to be broken through, but, due to the location of the break, the prestressing material may not be visible. Crosstie strength, generally, does not fail unless the crack extends through the top layer of the prestress strands. Once the crack extends beyond the top layer, there is usually a loss of strand and concrete bond strength.

Paragraph (d)(2). FRA is proposing that crossties counted to fulfill the requirements of proposed paragraph (b)(4) of this section must not be deteriorated or broken off in the vicinity of the shoulder or insert so that the fastener assembly can either pull out or move laterally more than ⅜ inch relative to the crosstie. These conditions weaken rail fastener integrity.

Paragraph (d)(3). FRA proposes to prescribe that crossties counted to fulfill the requirements of proposed paragraph (b)(4) of this section must not be deteriorated such that the base of either rail can move laterally more than ⅜ inch relative to the crosstie on curves of 2 degrees or greater; or can move laterally more than ½ inch relative to the crosstie on tangent track or curves of less than 2 degrees. FRA's intent is to allow for a combination rail movement up to the dimensions specified, but not separately. The rail and fastener assembly work as a system, capable of providing electrical insulation, and adequate resistance to lateral displacement, undesired gage widening, rail canting, rail rollover, and abrasive or excessive compressive stresses. This paragraph was specifically added to address Sec. 403(d)(6) of RSIA, which states that the Secretary may address excessive lateral rail movement in the concrete crosstie regulations.

Paragraph (d)(4). FRA is proposing that crossties counted to fulfill the requirements of proposed paragraph (b)(4) of this section must not be deteriorated or abraded at any point under the rail seat to a depth of ½ inch or more. The measurement of ½ inch includes depth from the loss of rail pad material. The importance of having pad material in place with sufficient hysteresis (*i.e.,* resilience (elasticity) to dampen high impact loading and recover) is paramount to control rail seat cracks caused by rail surface defects, wheel flats, or out of round wheels. Additionally, concrete crossties must be capable of providing adequate rail longitudinal restraint from excessive rail creepage or thermally induced forces or stress. "Rail creepage" is the tractive effort or pulling force exerted by a locomotive or car wheels, and "thermally induced forces or stress" is the longitudinal expansion and contraction of the rail, creating either compressive or tensile forces as the rail temperature increases or decreases, respectively. The loss of pad material causes a loss of toeload force, which may decrease longitudinal restraint. This paragraph was specifically proposed to address Sec. 403(d)(1) of RSIA, which states that the Secretary may address limits for rail seat abrasion in the concrete crosstie regulations.

Paragraph (d)(5). FRA is proposing that crossties counted to fulfill the requirements of proposed paragraph (b)(4) of this section must not be deteriorated such that the crosstie's fastening or anchoring system is unable to maintain longitudinal rail restraint, maintain rail hold down, or maintain gage, due to insufficient fastener toeload. Inspectors evaluate crossties individually by "definitional and functional" criteria. A compliant crosstie is demonstrated when a 39-foot track segment maintains safe track geometry and structurally supports the imposed wheel loads. In addition to ballast, anchors bear against the sides of crossties to control longitudinal rail movement, and certain types of fasteners also act to control rail movement by exerting a downward clamping force (toeload) on the upper rail base. Part of the complexity of crosstie assessment is the fastener component. Both crossties and fasteners act as a system to deliver the expected performance effect. A noncompliant crosstie and defective fastener assembly improperly maintains the rail position and support on the crosstie and contributes to excessive lateral gage widening (rail cant-rail rollover), and longitudinal rail movement because of loss of toeload.

Fastener assemblies or anchoring systems allow a certain amount of rail movement through the crosstie to effectively relieve thermal stress buildup. However, because of the unrestrained buildup of thermal stresses, the longitudinal expansion and contraction of the rail creates either compressive or tensile forces, respectively. When longitudinal rail movement is uncontrolled, it may disturb the track structure, causing misalignment (compression) or pull-apart (tensile) conditions to catastrophic failure. Specific longitudinal performance metrics would be undesirable and restrict certain fastener assembly designs and capabilities to control longitudinal rail movement. Therefore, track inspectors use good judgment in determining fastener assembly and crosstie effectiveness. This paragraph proposes to address Sec. 403(d)(3) and (d)(4) of RSIA, which state

that the Secretary may address, in the concrete crosstie regulations, missing or broken rail fasteners, and loss of appropriate toeload pressure.

Paragraph (d)(6). FRA is proposing that crossties counted to fulfill the requirements of proposed paragraph (b)(4) of this section must not be configured with less than two fasteners on the same rail except as provided in proposed § 213.127(c). FRA is proposing to revise this section, discussed further below, to include requirements specific to fasteners utilized in conjunction with concrete crossties.

Section 213.127 Rail Fastening Systems

FRA is proposing to revise this section by designating its existing text as paragraph (a) and adding new paragraphs (b) and (c).

Paragraph (b). FRA is proposing in this paragraph that, if rail anchors are applied to concrete crossties, the combination of the crossties, fasteners, and rail anchors must provide effective longitudinal restraint. FRA has elected not to define "effective longitudinal restraint," choosing instead to make this provision a performance-based standard.

Paragraph (c). FRA is proposing that, where fastener placement impedes insulated joints from performing as intended, the fastener may be modified or removed, provided that the crosstie supports the rail. By "supports," FRA means that the crosstie is in direct contact with the rail or leaves an incidental space between the tie and rail. Certain joint configurations do not permit conventional fasteners to fit properly. As a result, manufacturers offer a modified fastener to fit along the rail so that the fastener provides the longitudinal requirement, or it is removed completely, providing lateral restraint is accomplished by ensuring full contact with the rail.

FRA is requesting comment to provide stronger guidance regarding how a concrete tie provides support to the rail at a joint without a fastener present. The agency knows that this type of configuration is successful in maintaining the structural integrity in the field, but is interested in learning the quantifiable parameters of such a practice.

Section 213.234 Automated Inspection of Track Constructed With Concrete Crossties

FRA is proposing to add a new section requiring the automated inspection of track constructed with concrete crossties. Automated inspection technology is available to perform essential tasks necessary to supplement visual inspection, quantify performance-based specifications to guarantee safe car behavior, and provide objective confidence and ensure safe train operations. Automated inspections provide a level of safety superior to that of manual methods by better analyzing weak points in track geometry and structural components. The computer systems in automated inspection systems can accurately detect geometry deviations from the Track Safety Standards and can analyze areas that are often hard to examine with the human eye. Railroads benefit from automated inspection technology by having improved defect detection capabilities, suffering fewer track-related derailments, and improving overall track maintenance.

Automated inspection technology is used in Track Geometry Measurement Systems (TGMS), Gage Restraint Measurement Systems (GRMS), and Vehicle/Track Interaction (VTI) performance measurement systems. TGMS identify single or multiple noncompliant track geometry conditions. GRMS aid in locating good or poor performing track strength locations. VTI performance measurement systems encompass both acceleration and wheel forces that, when exceeding established thresholds, often cause damage to track components and rail equipment. These automated technologies may be combined in the same or different geometry car platforms or vehicles and require vehicle/track measurements to be made by truck frame accelerometers, carbody accelerometers, or by instrumented wheelsets to measure wheel/rail forces, ensuring performance limits are not exceeded.

Rail seat deterioration can be very difficult and time consuming for a track inspector to detect manually. Other than automated inspection, there are currently no other tools capable of aiding in the detection of rail seat deterioration. Automated inspection vehicles have proved effective in measuring rail seat deterioration, and the inspection vehicles can inspect much more rapidly and accurately than a visual track inspection.

Paragraph (a). FRA proposes that automated inspection technology shall be used to supplement visual inspection by Class I railroads including Amtrak, Class II railroads, other intercity passenger railroads, and commuter railroads or small governmental jurisdictions that serve populations greater than 50,000, on track constructed of concrete crossties for Class 3 main track over which regularly scheduled passenger service trains operate, and for all Class 4 and 5 main track constructed with concrete crossties. FRA is also proposing that automated inspections identify and report concrete crosstie deterioration or abrasion prohibited by proposed § 213.109(d)(4). The purpose of the automated inspection that would be required by this new paragraph is to measure for rail seat deterioration. As previously discussed, rail seat deterioration is the failure of the concrete surface between the rail and crossties. FRA is proposing in § 213.109(d)(4) that the crosstie must not be "deteriorated or abraded at any point under the rail seat to a depth of ½ inch or more." The depth includes the loss of rail pad material.

Paragraph (b). In this paragraph, FRA is proposing the frequencies at which track constructed of concrete crossties shall be inspected by automated means. FRA is proposing that an automated inspection be conducted twice each calendar year, with no less than 160 days between inspections, if annual tonnage on Class 4 and 5 main track and Class 3 main track with regularly scheduled passenger service exceeds 40 million gross tons (mgt). FRA is proposing that an automated inspection be conducted at least once each calendar year if annual tonnage on Class 4 and 5 main track and Class 3 track with regularly scheduled passenger service equals or is less than 40 mgt annually. FRA is also proposing that either an automated or walking inspection be conducted once per calendar year on Class 3, 4 and 5 main track with exclusively passenger service. And finally, FRA proposes that track not inspected in accordance with paragraph (b)(1) or (b)(2) of this section because of train operation interruption be reinspected within 45 days of the resumption of train operations by a walking or automated inspection. If this inspection is conducted as a walking inspection, FRA proposes that the next scheduled inspection be an automated inspection as proposed in this paragraph. FRA also requests comment on whether additional inspections should be required in passenger territory with significant freight tonnage and high track curvature and if so, how such requirements might be structured to target areas of risk while holding down costs.

Paragraph (c). In this paragraph, FRA proposes to exclude from the required automated inspections sections of tangent track of 600 feet or less constructed of concrete crossties, including, but not limited to, isolated track segments, experimental or test

track segments, highway/rail crossings, and wayside detectors. These exclusions are specified because FRA recognizes the economic burden caused by requiring automated inspections to be made on short isolated locations constructed of concrete crossties that may be difficult to measure without removal of additional material, such as grade crossing planking.

Paragraph (d). The Working Group was unable to come to consensus on this item. However, FRA determined that it would propose elements of the text that it presented to the Working Group. FRA proposes that the automated inspection measurement system must be capable of measuring and processing rail cant requirements which specify the following: (1) An accuracy angle, in degrees, to within ½ of a degree; (2) a distance-based sampling interval not exceeding two feet; and (3) calibration procedures and parameters assigned to the system, which assure that measured and recorded values accurately represent rail cant.

While other automated inspection technologies may exist in the field, FRA believes that the Rail Profile Measurement System (RPMS) is currently the best developed technology to measure rail seat deterioration. RPMS normally measures rail cant in tenths of a degree. It is often difficult to measure rail cant in the field with hand measurement tools because of the small dimension, *e.g.,* one degree rail cant angle equates to ⅛ inch depth between the rail seat and the rail. Typically the RPMS instrumentation onboard the FRA geometry cars are set to notify an advisory exception when the angle exceeds four degrees of negative or outward rail cant. This paragraph was specifically added to address Sec. 403(d)(1) of RSIA, which states that, in the concrete crosstie regulations, the Secretary may address limits for rail seat abrasion. FRA specifically requests public comment with regard to this item.

Paragraph (e). FRA is proposing that the automated inspection measurement system shall produce an exception report containing a systematic listing of all exceptions to § 213.109(d)(4), identified so that appropriate persons designated as fully qualified under § 213.7 can field-verify each exception. It would continue to state that each exception must be located and field-verified no later than 48 hours after the automated inspection, and that all field-verified exceptions are subject to all the requirements of part 213.

FRA expects that the track owner would want to ensure that any exception that the automated inspection detects would be field verified by a qualified person under § 213.7. This is not only to ensure that the exception report accurately reflects the conditions of the track, but also to ensure that a qualified person can take appropriate remedial action in a timely manner. Additionally, FRA reminds track owners that all field-verified exceptions are subject to all of the Track Safety Standards.

Paragraph (f). FRA is proposing that the track owner maintain a record of the inspection data and the exception record for the track inspected in accordance with this paragraph for a minimum of two years. The record must include the date and location of limits of the inspection, type and location of each exception, and the results of field verification, and remedial action if required. The locations required must be provided either by milepost or by some other objective means, such as by the location description provided by the Global Positioning System. This proposal is intended to require the track owner to keep a good record of the conditions of track constructed of concrete crossties and, through such records, to help FRA track inspectors to gain access to and accurately assess the railroad's compliance history.

Paragraph (g). FRA is proposing that the track owner institute the necessary procedures for maintaining the integrity of the data collected by the measurement system. The track owner must maintain and make available to FRA documented calibration procedures of the measurement system that, at a minimum, specifies an instrument verification procedure that will ensure correlation between measurements made on the ground and those recorded by the instrumentation. Also, the track owner must maintain each instrument used for determining compliance with this section such that it is accurate to within ⅛ of an inch for rail seat deterioration.

The purpose of this paragraph is to ensure that the equipment that the track owner is using to comply with the regulations accurately detects what it is designed to detect.

Paragraph (h). FRA is proposing that the track owner provide training in handling rail seat deterioration exceptions to all persons designated as fully qualified under § 213.7 and whose territories are subject to the requirements of § 213.234. At a minimum, the training shall address interpretation and handling of the exception reports generated by the automated inspection measurement system, locating and verifying exceptions in the field and required remedial action, and recordkeeping requirements.

FRA aims to ensure that all persons required to comply with the regulations are properly trained. Such persons should at least understand the basic principles of the required automated inspection process, including handling of the exception reports, field verification, and recordkeeping requirements. FRA requests public comment regarding the frequency at which such training should occur and the period for which training records should be retained.

VI. Regulatory Impact and Notices

A. Executive Order 12866 and DOT Regulatory Policies and Procedures

This proposed rule has been evaluated in accordance with existing policies and procedures and determined to be non-significant under both Executive Order 12866 and DOT policies and procedures. *See* 44 FR 11034; February 26, 1979. FRA has conducted and placed in the docket a Regulatory Impact Analysis addressing the costs and benefits associated with this NPRM. Document inspection and copying facilities are available at the Department of Transportation, West Building Ground Floor, Room W12–140, 1200 New Jersey Avenue, SE., Washington, DC 20590. Docket material is also available for inspection on the Internet at *http://www.regulations.gov.* Photocopies may also be obtained by submitting a written request to the FRA Docket Clerk at the Office of Chief Counsel, Mail Stop 10, Federal Railroad Administration, 1200 New Jersey Avenue, SE., Washington, DC 20590; please refer to Docket No. FRA–2009–0007. FRA welcomes comments on this document.

The concrete tie standards are intended to avoid a relatively new type of derailment where a train traveling over concrete ties causes the rail to roll to the outside of a curve, because the rail seat has worn away (abraded). The proposed rule clarifies what constitutes an effective concrete tie and fastening system, and also requires railroads, other than small entities, to conduct automated inspections of the concrete ties.

For those automated inspection cars with a sufficient number of sensors to measure rail cant, but that do not currently measure rail cant, the owner, either a railroad or contractor, would have to modify the software to calculate rail cant and provide alarms for rail cant in excess of limits. This is the basic cost burden associated with this NPRM. FRA believes that measuring the rail cant

will avoid future accidents such as the accident near Home Valley, Washington, described above, in which 30 people (22 passengers and 8 employees) sustained minor injuries; 14 of those people were taken to local hospitals. Two of the injured passengers were kept overnight for further observation; the rest were released. Track and equipment damages, in addition to clearing costs associated with the accident, totaled about $854,000.

FRA is confident that implementation of the proposed rule would result in safety benefits of $124,800 annually after an initial cost of $1,400,000. Over 20 years, the discounted total benefit would be $1,414,682 at a 7 percent annual discount rate and $1,912,410 at a 3 percent annual discount rate. The costs are not discounted because they are incurred in the initial year, so the discounted net benefit will be $14,682 at a 7 percent annual discount rate and $512,410 at a 3 percent annual discount rate. Safety benefits would justify the initial investment. Based on a 7 percent discount rate, the benefits are slightly higher than the costs, and there is a meaningful reduction in safety risk, which is not fully quantified because some accident costs were not quantified. The net benefits are more significant at the 3 percent discount rate.

B. Regulatory Flexibility Act and Executive Order 13272

The Regulatory Flexibility Act of 1980 (the Act) (5 U.S.C. 601 *et seq.*) and Executive Order 13272 require a review of proposed and final rules to assess their impact on small entities. An agency must prepare an initial regulatory flexibility analysis unless it determines and certifies that a rule, if promulgated, would not have a significant impact on a substantial number of small entities.

The U.S. Small Business Administration (SBA) stipulates in its "Size Standards" that the largest a railroad business firm that is "for-profit" may be, and still be classified as a "small entity," is 1,500 employees for "Line-Haul Operating Railroads" and 500 employees for "Switching and Terminal Establishments." 13 CFR part 121. "Small entity" is defined in the Act as a small business that is independently owned and operated, and is not dominant in its field of operation. 5 U.S.C. 601. Additionally, 5 U.S.C. 601(5) defines "small entities" as governments of cities, counties, towns, townships, villages, school districts, or special districts with populations less than 50,000. SBA's "Size Standards" may be altered by Federal agencies after consultation with SBA and in conjunction with public comment. Pursuant to that authority, FRA has published a final policy that formally establishes "small entities" as Class III railroads, contractors, and shippers meeting the economic criteria established for Class III railroads in 49 CFR 1201.1–1, and commuter railroads or small governmental jurisdictions that serve populations of 50,000 or less. 49 CFR part 209, app. C. FRA believes that no shippers, contractors, or small governmental jurisdictions would be affected by this proposal. At present there are no commuter railroads that would be considered small entities. The revenue requirement for Class III railroads is currently nominally $20 million or less in annual operating revenue. The $20-million limit (which is adjusted by applying the railroad revenue deflator adjustment) is based on the Surface Transportation Board's threshold for a Class III railroad carrier. FRA uses the same revenue dollar limit to determine whether a railroad or shipper or contractor is a small entity.

Class I railroads have significant segments of concrete crossties, and own the overwhelming majority of all installed crossties. About a dozen Class II railroads that were formerly parts of Class I systems may have limited segments, and some Class III railroads may have remote locations with concrete crossties, typically in turnouts. Small railroads were consulted during the RSAC Working Group deliberations, and their interests have been taken into consideration in this NPRM. The provisions requiring automated inspections do not apply to Class III railroads or any commuter railroads that may be considered small entities. Such entities would only be subject to new requirements for tie and fastener conditions; however, small railroads typically do not have large numbers of concrete ties, and the cost associated with meeting such requirements is not significant. Therefore, FRA is certifying that it expects there will be no significant economic impact on a substantial number of small entities.

FRA seeks comments on all aspects of this assessment and certification.

C. Paperwork Reduction Act

The information collection requirements in this proposed rule have been submitted for approval to the Office of Management and Budget (OMB) under the Paperwork Reduction Act of 1995, 44 U.S.C. 3501 *et seq.* The section that contains the new information collection requirements is noted below, and the estimated burden time to fulfill each requirement is as follows:

49 CFR section	Respondent universe	Total annual responses	Average time per response	Total annual burden hours
213.234–Automated Inspection of Track Constructed with Concrete Crossties:				
—Exception Reports	18 Railroads	150 reports	8 hours	1,200
—Field-Verified Exception Reports	18 Railroads	150 field verifications	2 hours	300
—Records of Inspection Data and Exception Records.	18 Railroads	150 records	30 minutes	75
—Procedures for Maintaining Data Integrity Collected by Measurement System.	18 Railroads	18 procedures	4 hours	72
—Training of Employees in Handling Seat Deterioration.	18 Railroads	2,000 trained employees.	8 hours	16,000

All estimates include the time for reviewing instructions; searching existing data sources; gathering or maintaining the needed data; and reviewing the information. Pursuant to 44 U.S.C. 3506(c)(2)(B), FRA solicits comments concerning the following: Whether these information collection requirements are necessary for the proper performance of the functions of FRA, including whether the information has practical utility; the accuracy of FRA's estimates of the burden of the information collection requirements; the quality, utility, and clarity of the information to be collected; and whether the burden of collection of information on those who are to respond, including through the use of automated collection techniques or other forms of information technology,

may be minimized. For information or a copy of the paperwork package submitted to OMB, contact Mr. Robert Brogan, Office of Railroad Safety, Information Clearance Officer, at 202–493–6292, or Ms. Kimberly Toone, Office of Financial Management and Administration, Information Clearance Officer, at 202–493–6132.

Organizations and individuals desiring to submit comments on the collection of information requirements should direct them to Mr. Robert Brogan or Ms. Kimberly Toone, Federal Railroad Administration, 1200 New Jersey Avenue, SE., 3rd Floor, Washington, DC 20590. Comments may also be submitted via e-mail to Mr. Brogan or Ms. Toone at the following address: *Robert.brogan@dot.gov; Kimberly.toone@dot.gov*

OMB is required to make a decision concerning the collection of information requirements contained in this proposed rule between 30 and 60 days after publication of this document in the **Federal Register**. Therefore, a comment to OMB is best assured of having its full effect if OMB receives it within 30 days of publication. The final rule and associated information collection submission will respond to any OMB or public comments on the information collection requirements contained in this proposal.

FRA is not authorized to impose a penalty on persons for violating information collection requirements that do not display a current OMB control number, if required. FRA intends to obtain current OMB control numbers for any new information collection requirements resulting from this rulemaking action prior to the effective date of the eventual final rule. The OMB control number, when assigned, will be announced by separate notice in the **Federal Register**.

D. Environmental Impact

FRA has evaluated this NPRM in accordance with its "Procedures for Considering Environmental Impacts" (FRA's Procedures) (64 FR 28545, May 26, 1999) as required by the National Environmental Policy Act (42 U.S.C. 4321 *et seq.*), other environmental statutes, Executive Orders, and related regulatory requirements. FRA has determined that this action is not a major FRA action (requiring the preparation of an environmental impact statement or environmental assessment) because it is categorically excluded from detailed environmental review pursuant to section 4(c)(20) of FRA's Procedures. 64 FR 28547, May 26, 1999. In accordance with section 4(c) and (e) of FRA's Procedures, the agency has further concluded that no extraordinary circumstances exist with respect to this NPRM that might trigger the need for a more detailed environmental review. As a result, FRA finds that this NPRM is not a major Federal action significantly affecting the quality of the human environment.

E. Federalism Implications

Executive Order 13132, "Federalism" (64 FR 43255, Aug. 10, 1999), requires FRA to develop an accountable process to ensure "meaningful and timely input by State and local officials in the development of regulatory policies that have federalism implications." "Policies that have federalism implications" are defined in the Executive Order to include regulations that have "substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government." Under Executive Order 13132, the agency may not issue a regulation with federalism implications that imposes substantial direct compliance costs and that is not required by statute, unless the Federal government provides the funds necessary to pay the direct compliance costs incurred by State and local governments or the agency consults with State and local government officials early in the process of developing the regulation. Where a regulation has federalism implications and preempts State law, the agency seeks to consult with State and local officials in the process of developing the regulation.

FRA has analyzed this proposed rule in accordance with the principles and criteria contained in Executive Order 13132. If adopted, this proposed rule would not have a substantial direct effect on the States, on the relationship between the Federal government and the States, or on the distribution of power and responsibilities among the various levels of government. FRA has also determined that this proposed rule would not impose substantial direct compliance costs on State and local governments. Therefore, the consultation and funding requirements of Executive Order 13132 do not apply.

Moreover, FRA notes that RSAC, which endorsed and recommended the majority of this proposed rule, has as permanent members, two organizations representing State and local interests: AASHTO and ASRSM. Both of these State organizations concurred with the RSAC recommendation made in this rulemaking. RSAC regularly provides recommendations to the Administrator of FRA for solutions to regulatory issues that reflect significant input from its State members. To date, FRA has received no indication of concerns about the federalism implications of this rulemaking from these representatives or from any other representatives of State government.

However, if adopted, this proposed rule could have preemptive effect by operation of law under 49 U.S.C. 20106 (Sec. 20106). Sec. 20106 provides that States may not adopt or continue in effect any law, regulation, or order related to railroad safety or security that covers the subject matter of a regulation prescribed or order issued by the Secretary of Transportation (with respect to railroad safety matters) or the Secretary of Homeland Security (with respect to railroad security matters), except when the State law, regulation, or order qualifies under the "local safety or security hazard" exception to Sec. 20106.

In sum, FRA has analyzed this proposed rule in accordance with the principles and criteria contained in Executive Order 13132. As explained above, FRA has determined that this proposed rule has no federalism implications, other than the possible preemption of State laws under Sec. 20106. Accordingly, FRA has determined that preparation of a federalism summary impact statement for this proposed rule is not required.

F. Unfunded Mandates Reform Act of 1995

Pursuant to Sec. 201 of the Unfunded Mandates Reform Act of 1995 (Pub. L. 104–4, 2 U.S.C. 1531), each Federal agency "shall, unless otherwise prohibited by law, assess the effects of Federal regulatory actions on State, local, and tribal governments, and the private sector (other than to the extent that such regulations incorporate requirements specifically set forth in law)." Sec. 202 of the Act (2 U.S.C. 1532) further requires that "before promulgating any general notice of proposed rulemaking that is likely to result in the promulgation of any rule that includes any Federal mandate that may result in the expenditure by State, local, and tribal governments, in the aggregate, or by the private sector, of $100,000,000 or more (adjusted annually for inflation) [currently $140,800,000] in any 1 year, and before promulgating any final rule for which a general notice of proposed rulemaking was published, the agency shall prepare a written statement" detailing the effect on State, local, and tribal governments and the private sector. This NPRM will not result in the expenditure, in the

aggregate, of $140,800,000 or more in any one year, and thus preparation of such a statement is not required.

G. Energy Impact

Executive Order 13211 requires Federal agencies to prepare a Statement of Energy Effects for any "significant energy action." *See* 66 FR 28355 (May 22, 2001). Under the Executive Order a "significant energy action" is defined as any action by an agency that promulgates or is expected to lead to the promulgation of a final rule or regulation, including notices of inquiry, advance notices of proposed rulemaking, and notices of proposed rulemaking: (1)(i) That is a significant regulatory action under Executive Order 12866 or any successor order, and (ii) is likely to have a significant adverse effect on the supply, distribution, or use of energy; or (2) that is designated by the Administrator of the Office of Information and Regulatory Affairs as a significant energy action. FRA has evaluated this NPRM in accordance with Executive Order 13211. FRA has determined that this NPRM is not likely to have a significant adverse effect on the supply, distribution, or use of energy. Consequently, FRA has determined that this NPRM is not a "significant energy action" within the meaning of the Executive Order.

H. Privacy Act Statement

Anyone is able to search the electronic form of all comments received into any of DOT's dockets by the name of the individual submitting the comment (or signing the comment, if submitted on behalf of an association, business, labor union, etc.). You may review DOT's complete Privacy Act Statement published in the **Federal Register** on April 11, 2000 (Volume 65, Number 70, Pages 19477–78), or you may visit *http://DocketsInfo.dot.gov.*

List of Subjects in 49 CFR Part 213

Penalties, Railroad safety, Reporting and recordkeeping requirements.

The Proposed Rule

For the reasons discussed in the preamble, FRA proposes to amend part 213 of chapter II, subtitle B of title 49, Code of Federal Regulations, as follows:

PART 213—[AMENDED]

1. The authority citation for part 213 is revised to read as follows:

Authority: 49 U.S.C. 20102–20114 and 20142; Sec. 403, Div. A, Public Law 110–432, 122 Stat. 4885; 28 U.S.C. 2461, note; and 49 CFR1.49.

§ 213.2 [Removed]

2. Section 213.2, Preemptive effect, is removed.

3. Section 213.109 is revised to read as follows:

§ 213.109 Crossties.

(a) Crossties shall be made of a material to which rail can be securely fastened.

(b) Each 39-foot segment of track shall have at a minimum—

(1) A sufficient number of crossties that in combination provide effective support that will—

(i) Hold gage within the limits prescribed in § 213.53(b);

(ii) Maintain surface within the limits prescribed in § 213.63; and

(iii) Maintain alinement within the limits prescribed in § 213.55;

(2) The minimum number and type of crossties specified in paragraph (b)(4) of this section and described in paragraph (c) or (d), as applicable, of this section effectively distributed to support the entire segment;

(3) At least one nondefective crosstie of the type specified in paragraphs (c) and (d) of this section that is located at a joint location as specified in paragraph (e) of this section; and

(4) The minimum number of crossties as indicated in the following table.

FRA track class	Tangent track, turnouts, and curves	
	Tangent track and curved track less than or equal to 2 degrees	Turnouts and curved track greater than 2 degrees
Class 1	5	6
Class 2	8	9
Class 3	8	10
Class 4 and 5	12	14

(c) Crossties, other than concrete, counted to satisfy the requirements set forth in paragraph (b)(4) of this section shall not be—

(1) Broken through;

(2) Split or otherwise impaired to the extent the crosstie will allow the ballast to work through, or will not hold spikes or rail fasteners;

(3) So deteriorated that the crosstie plate or base of rail can move laterally ½; inch relative to the crosstie; or

(4) Cut by the crosstie plate through more than 40 percent of a crosstie's thickness.

(d) Concrete crossties counted to satisfy the requirements set forth in paragraph (b)(4) of this section shall not be—

(1) Broken through or deteriorated to the extent that prestressing material is visible;

(2) Deteriorated or broken off in the vicinity of the shoulder or insert so that the fastener assembly can either pull out or move laterally more than ⅜ inch relative to the crosstie;

(3) Deteriorated such that the base of either rail can move laterally more than ⅜ inch relative to the crosstie on curves of 2 degrees or greater; or can move laterally more than ½ inch relative to the crosstie on tangent track or curves of less than 2 degrees;

(4) Deteriorated or abraded at any point under the rail seat to a depth of ½ inch or more;

(5) Deteriorated such that the crosstie's fastening or anchoring system is unable to maintain longitudinal rail restraint, or maintain rail hold down, or maintain gage due to insufficient fastener toeload; or

(6) Configured with less than two fasteners on the same rail except as provided in § 213.127(c).

(e) Class 1 and 2 track shall have one crosstie whose centerline is within 24 inches of each rail joint (end) location. Class 3, 4, and 5 track shall have either one crosstie whose centerline is within 18 inches of each rail joint location or two crossties whose centerlines are within 24 inches either side of each rail joint location. The relative position of these crossties is described in the following three diagrams:

Each rail joint in Class 1 and 2 track shall be supported by at least one crosstie specified in paragraphs (c) and (d) of this section whose centerline is within 48 inches as shown in Figure 1.

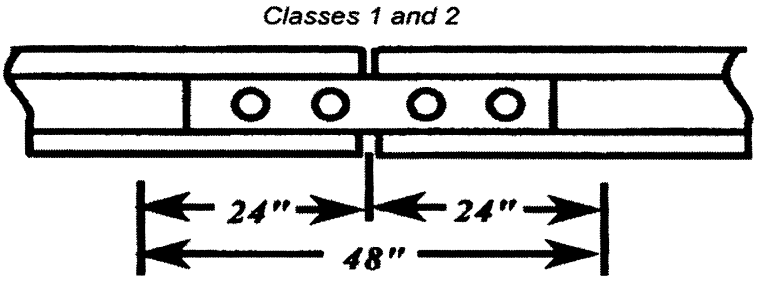

Figure 1

Each rail joint in Class 3, 4, and 5 track shall be supported by either at least one crosstie specified in paragraphs (c) and (d) of this section whose centerline is within 36 inches as shown in Figure 2, or:

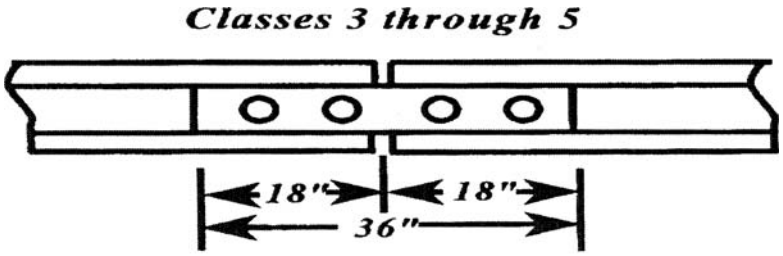

Figure 2

Two crossties, one on each side of the rail joint, whose centerlines are within 24 inches of the rail joint location as shown in Figure 3.

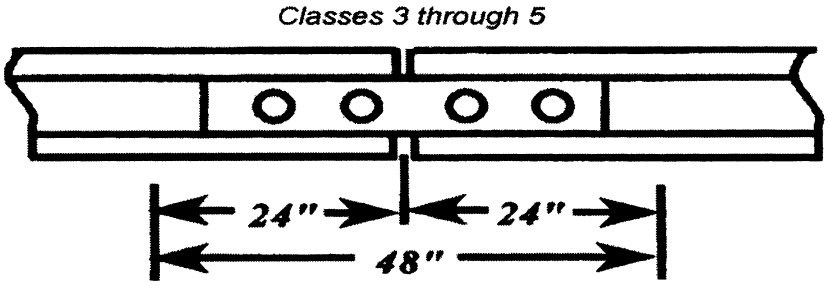

Figure 3

(f) For track constructed without crossties, such as slab track, track connected directly to bridge structural components, track over servicing pits, etc., the track structure shall meet the requirements of paragraph (b)(1) of this section.

4. Section 213.127 is revised to read as follows:

§ 213.127 Rail fastening systems.

(a) Track shall be fastened by a system of components that effectively maintains gage within the limits prescribed in § 213.53(b). Each component of each such system shall be evaluated to determine whether gage is effectively being maintained.

(b) If rail anchors are applied to concrete crossties, the combination of the crossties, fasteners, and rail anchors must provide effective longitudinal restraint.

(c) Where fastener placement impedes insulated joints from performing as intended, the fastener may be modified or removed, provided that the crosstie supports the rail.

5. New § 213.234 is added to read as follows:

§ 213.234 Automated inspection of track constructed with concrete crossties.

(a) *General.* Except for track described in paragraph (c) of this section, in addition to the track inspection required under § 213.233, for Class 3 main track constructed with concrete crossties over which regularly scheduled passenger service trains operate, and for Class 4 and 5 main track constructed with concrete crossties, automated inspection technology shall be used as indicated in paragraph (b) of this section, as a supplement to visual inspection, by Class I railroads (including Amtrak),

Class II railroads, other intercity passenger railroads, and commuter railroads or small governmental jurisdictions that serve populations greater than 50,000. Automated inspection shall identify and report exceptions to conditions described in § 213.109(d)(4).

(b) *Frequency of automated inspections.* Automated inspections shall be conducted at the following frequencies:

(1) If annual tonnage on Class 4 and 5 main track and Class 3 main track with regularly scheduled passenger service, exceeds 40 million gross tons (mgt) annually, at least twice each calendar year, with no less than 160 days between inspections.

(2) If annual tonnage on Class 4 and 5 main track and Class 3 main track with regularly scheduled passenger service is equal to or less than 40 mgt annually, at least once each calendar year.

(3) On Class 3, 4, and 5 main track with exclusively passenger service, either an automated inspection or walking inspection must be conducted once per calendar year.

(4) Track not inspected in accordance with paragraph (b)(1) or (b)(2) of this section because of train operation interruption shall be reinspected within 45 days of the resumption of train operations by a walking or automated inspection. If this inspection is conducted as a walking inspection, the next inspection shall be an automated inspection as prescribed in this paragraph.

(c) *Nonapplication.* Sections of tangent track 600 feet or less constructed of concrete crossties, including, but not limited to, isolated track segments, experimental or test track segments, highway-rail crossings, and wayside detectors, are excluded from the requirements of this section.

(d) *Performance standard for automated inspection measurement system.* The automated inspection measurement system must be capable of measuring and processing rail cant requirements that specify the following:

(1) An accuracy angle, in degrees, to within ½ of a degree;

(2) A distance-based sampling interval, which shall not exceed two feet; and

(3) Calibration procedures and parameters assigned to the system, which assure that measured and recorded values accurately represent rail cant.

(e) *Exception reports to be produced by system; duty to field-verify exceptions.* The automated inspection measurement system shall produce an exception report containing a systematic listing of all exceptions to § 213.109(d)(4), identified so that an appropriate person(s) designated as fully qualified under § 213.7 can field-verify each exception.

(1) Each exception must be located and field verified no later than 48 hours after the automated inspection.

(2) All field-verified exceptions are subject to all the requirements of this part.

(f) *Recordkeeping requirements.* The track owner shall maintain a record of the inspection data and the exception record for the track inspected in accordance with this paragraph for a minimum of two years. The exception reports must include the following:

(1) Date and location of limits of the inspection;

(2) Type and location of each exception; and

(3) Results of field verification, and remedial action if required.

(g) *Procedures for integrity of data.* The track owner shall institute the necessary procedures for maintaining the integrity of the data collected by the measurement system. At a minimum, the track owner shall do the following:

(1) Maintain and make available to FRA documented calibration procedures of the measurement system that, at a minimum, specify an instrument verification procedure that ensures correlation between measurements made on the ground and those recorded by the instrumentation; and

(2) Maintain each instrument used for determining compliance with this section such that it is accurate to within ⅛ of an inch for rail seat deterioration.

(h) *Training.* The track owner shall provide training in handling rail seat deterioration exceptions to all persons designated as fully qualified under § 213.7 and whose territories are subject to the requirements of § 213.234. At a minimum, the training shall address the following:

(1) Interpretation and handling of the exception reports generated by the automated inspection measurement system;

(2) Locating and verifying exceptions in the field and required remedial action; and

(3) Recordkeeping requirements.

Issued in Washington, DC, on August 23, 2010.

Joseph C. Szabo,

Administrator.

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