## INFORMATION COLLECTION SUPPORTING JUSTIFICATION TRACK SAFETY STANDARDS; OMB No. 2130-0010

## **Summary**

- This submission is a request for an <u>extension with change</u> of the last approval granted by OMB on **March 2, 2014**, and which expires **March 31, 2017**.
- FRA published the required 60-day **Federal Register** Notice on November 16, 2016. See 81 FR 80714. FRA received **no** comments in response to this Notice.
- The total number of burden **hours requested** for this submission is **1,816,152 hours.**
- The total burden **previously approved** for this information collection amounted to **2,475,698 hours.**
- The <u>decrease</u> in burden from the last approved submission amounts to **659,546 hours**.
- Total number of **responses requested** for this submission is **2,765,261**.
- Total number of responses previously approved for this collection is 2,800,634
- Adjustment(s) <u>decreased</u> the burden by 659,546 hours and responses by 35,373.
- There are <u>no</u> **program changes** at this time.
- \*\*The answer to question <u>number 12</u> itemizes the hourly burden associated with each requirement of this rule (See pp. 18-76).
- \*\*The answer to question <u>number 15</u> itemizes the program change (See pp. 77-82).
- 1. <u>Circumstances that make collection of the information necessary.</u>

## **Background**

On March 17, 2001, the *California Zephyr*, a National Railroad Passenger Corporation (Amtrak) passenger train carrying 257 passengers and crew members, derailed near Nodaway, Iowa. According to the NTSB, sixteen cars decoupled from the two

locomotives and eleven cars went off the rails. Seventy-eight people were injured and one person died from the accident. <u>See</u> NTSB/RAB-02-01.

The NTSB discovered a broken rail at the point of derailment. The broken pieces of rail were reassembled at the scene, and it was determined that they came from a 15½-foot section of rail that had been installed as replacement rail, or "plug rail," at this location in February, 2001. The replacement had been made because, during a routine scan of the existing rail on February 13, 2001, the Burlington Northern and Santa Fe Railway (now BNSF Railway Company or BNSF) discovered internal defects that could possibly hinder the rail's effectiveness. A short section of the continuous welded rail that contained the defects was removed, and a piece of replacement rail was inserted. However, the plug rail did not receive an ultrasonic inspection before or after installation.

During the course of the accident investigation, the NTSB could not reliably determine the source of the plug rail. While differing accounts were given concerning the origin of the rail prior to its installation in the track, the replacement rail would most likely have been rail which was removed from another track location for reuse. Analysis of the rail found that the rail failed due to fatigue initiating from cracks associated with the precipitation of internal hydrogen. If the rail had been ultrasonically inspected prior to its reuse, it is likely that the defects could have been identified and that section of rail might not have been used as plug rail.

As a result of its investigation of the Nodaway, Iowa, railroad accident, the NTSB recommended that FRA require railroads to conduct ultrasonic or other appropriate inspections to ensure that rail used to replace defective segments of existing rail is free from internal defects. <u>See</u> NTSB Recommendation-02-5.

On October 20, 2006, Norfolk Southern Railway Company (NS) train 68QB119 derailed while crossing the Beaver River railroad bridge in New Brighton, Pennsylvania. The train was pulling eighty-three tank cars loaded with denatured ethanol, a flammable liquid. Twenty-three of the tank cars derailed near the east end of the bridge, causing several of the cars to fall into the Beaver River. Twenty of the derailed cars released their loads of ethanol, which subsequently ignited and burned for forty-eight hours. Some of the unburned ethanol liquid was released into the river and the surrounding soil. Homes and businesses within a seven-block area of New Brighton and in an area adjacent to the accident had to be evacuated for days. While no injuries or fatalities resulted from the accident, NS estimated economic and environmental damages to be \$5.8 million. See NTSB/RAB-08-9 through 12.

The NTSB determined that the probable cause of the derailment was an undetected internal rail defect identified to be a detail fracture. The NTSB also noted that insufficient regulation regarding internal rail inspection may have contributed to the accident.

This accident demonstrates the potential for rail failure with subsequent derailment if a railroad's internal rail defect detection process fails to detect an internal rail flaw. This accident also indicates a need for adequate requirements that will ensure rail inspection and maintenance programs identify and remove rail with internal defects before they reach critical size and result in catastrophic rail failures.

On February 24, 2009, the Office of Inspector General (OIG) for the Department of Transportation (DOT) issued a report presenting the results of its audit of FRA's oversight of track-related safety issues. The report made two findings. First, the OIG found that FRA's safety regulations for internal rail flaw testing did not require the railroads to report the specific track locations, such as milepost numbers or track miles that were tested during these types of inspections. Second, the OIG found that FRA's inspection data systems did not provide adequate information for determining the extent to which FRA's track inspectors have reviewed the railroads' records for internal rail flaw testing and visual track inspections to assess compliance with safety regulations. The OIG recommended that FRA revise its track safety regulations for internal rail flaw testing to require railroads to report track locations covered during internal rail flaw testing, and that FRA develop specific inspection activity codes for FRA inspectors to use to report on whether the record reviews FRA inspectors conduct were for internal rail flaw testing or visual track inspections. Enhancing the Federal Railroad Administration's Oversight of Track Safety Inspections, Department of Transportation, Office of Inspector General, CR-2009-038, February 24, 2009.

The first Federal Track Safety Standards were published on October 20, 1971, following the enactment of the Federal Railroad Safety Act of 1970, Pub. L. No. 91-458, 84 Stat. 971 (October 16, 1970), in which Congress granted to FRA comprehensive authority over "all areas of railroad safety." See 36 FR 20336. FRA envisioned the new Standards to be an evolving set of safety requirements subject to continuous revision allowing the regulations to keep pace with industry innovations and agency research and development. The most comprehensive revision of the Standards resulted from the Rail Safety Enforcement and Review Act of 1992, Pub. L. No. 102-365, 106 Stat. 972 (Sept. 3, 1992), later amended by the Federal Railroad Safety Authorization Act of 1994, Pub. L. No. 103-440, 108 Stat. 4615 (Nov. 2, 1994). The amended statute is codified at 49 U.S.C. 20142 and required the Secretary of Transportation (Secretary) to review and then revise the Track Safety Standards, which are contained in 49 CFR part 213. The Secretary has delegated such statutory responsibilities to the Administrator of FRA. See 49 CFR 1.89. FRA carried out this review on behalf of the Secretary, which resulted in FRA issuing a final rule amending the Standards in 1998. See 63 FR 34029, June 22, 1998; 63 FR 54078, Oct. 8, 1998.

Pursuant to 49 U.S.C. 20103, the Secretary may prescribe regulations as necessary in any area of railroad safety. FRA began its examination of rail integrity issues through RSAC on October 27, 2007. On October 16, 2008, the RSIA (Pub. L. 110-432, Division A) was enacted. Section 403(a) of the RSIA required the Secretary to conduct a study of track

issues, known as the Track Inspection Time Study (Study). The Study was to determine whether track inspection intervals needed to be amended; whether track inspection and repair priorities and methods were required; and whether the speed of track inspection vehicles should be regulated. As part of the Study, section 403(b) instructed the Secretary to consider "the most current rail flaw, rail defect growth, rail fatigue, and other relevant track- or rail-related research and studies," as well as new inspection technologies, and National Transportation Safety Board (NTSB) and FRA accident information. The Study was completed and presented to Congress on May 2, 2011. Section 403(c) of the RSIA further provided that FRA prescribe regulations based on the results of the Study two years after its completion.

FRA notes that Section 403 of the RSIA contained one additional mandate, which FRA has already fulfilled, promulgating regulations for concrete crossties. On April 1, 2011, FRA published a final rule on concrete crosstie regulations per this mandate in Section 403(d). That final rule specifies requirements for effective concrete crossties, for rail fastening systems connected to concrete crossties, and for automated inspections of track constructed with concrete crossties. See 76 FR 18073. FRA received two petitions for reconsideration in response to that final rule, and responded to them by final rule published on September 9, 2011. See 76 FR 55819.

In this final rule, FRA is amending the Federal Track Safety Standards to promote the safety of railroad operations by enhancing rail flaw detection processes. In particular, FRA is establishing minimum qualification requirements for rail flaw detection equipment operators, as well as revising requirements for effective rail inspection frequencies, rail flaw remedial actions, and rail inspection records. In addition, FRA is removing regulatory requirements concerning joint bar fracture reporting. This final rule is intended to implement section 403 of the Rail Safety Improvement Act of 2008 (RSIA).

## 2. How, by whom, and for what purpose the information is to be used.

The information collected under § 213.237 is used by FRA to ensure and enhance rail safety. Specifically, railroads are now required to send a detailed request to FRA to change the designation of a rail inspection segment or establish a new segment. Collecting service failure rates that are averaged over excessively large segments of track (such as segments longer than a subdivision length) might fail to identify discrete areas of weakness with chronically high concentrations of service failures. At the same time, if a segment size is too small, one random failure could trigger a service failure rate in excess of the railroad's/track owner's performance target under this section. In order to maintain consistency and uniformity, FRA requires that, if a railroad wishes to change or deviate from its segment lengths, the railroad must receive FRA approval to make that change. This ensures that the railroads do not have the ability to freely alter the defined segment length in order to compensate for a sudden increase of detected defects and service

failures that could require an adjustment to the test frequency as a result of accelerated defect development. FRA seeks to avoid a situation where the required change will detrimentally impact overall safety by allowing for a segment length to be purposefully established to absorb an area of defect development and rail failure that will unacceptably cause a less frequent test cycle. FRA believes that the requirement of agency approval for any change to a designated segment will preclude such possibilities and enhance rail safety.

Also, under § 213.237, railroads/track owners must notify FRA and all affected employees of the designation's effective date after FRA's approval or conditional approval. FRA inspectors uses this notification to ensure that railroads conduct necessary internal rail inspections over these specified segments as appropriate. Further, this information is used by railroad employees to understand any changes to their duties, particularly pertaining to maintenance activities and conducting internal rail inspections over these designated segments.

Additionally, under § 213.237, if the service failure rate identified in paragraph (a) of this section is not achieved, railroads/track owners must inform FRA of this fact within 45 days of the end of the defined 12-month period in which the performance target is exceeded and must provide an explanation as to why the performance target was not achieved. FRA uses this information to determine whether railroads are properly carrying out their internal rail inspections and whether they need to take additional measures to meet their performance targets, reduce rail defects, and maintain rail safety.

The information collected under § 213.7(c) is used by FRA to ensure that individuals designated by railroads/track owners as qualified to inspect continuous welded rail (CWR) track or supervise the installation, adjustment, and maintenance of CWR track meet the criteria spelled-out in this section. Specifically, FRA inspectors review these designations to ensure named individuals possess (1) current qualifications under either paragraphs (a) or (b) of this section; (2) have successfully completed a comprehensive training course specifically developed for the application of written CWR procedures issued by the track owner; (3) have demonstrated to the track owner that he/she knows and understands the requirements of the written CWR procedures, can detect deviations from those requirements, and can prescribe appropriate remedial action(s) to correct or safely compensate for those deviations; and (4) have written authorization from the track owner to prescribe remedial action(s) to correct or safely compensate for deviations from the requirements in the CWR procedures and successfully completed a recorded examination on the procedures as part of the qualification process.

The information collected under § 213.118 and § 213.119 is used by FRA to ensure that railroads/track owners develop and implement plans containing written procedures which address the installation, adjustment, maintenance and inspection of CWR, inspection of CWR joints, and a training program for the application of those procedures. Railroads/track owners must file their CWR plans with the FRA Associate Administrator for Safety

not less than 30 days before implementing their plans. This includes submitting revisions to an existing CWR plan in order for changes to take effect under the regulation. FRA then reviews these plans to ensure that railroads/track owners develop and implement written procedures which prescribe the scheduling and conduct of physical track inspections to detect cracks and other indications of incipient failures in joints in CWR. To ensure compliance with the requirements of this rule, FRA confirms that railroads or track owners specify in their written procedures that all joints in CWR in the various track classes are inspected according to the schedule prescribed in § 213.119(h)(6)(i).

Also, FRA verifies that these written procedures address the conduct of inspections to detect cracks and other indications of potential failures in CWR joints and that these procedures address the following: (1) The inspection of joints and the track structure at joints, including, at a minimum, periodic on-foot inspections; (2) Identify joint bars with visible or otherwise detectable cracks and conduct remedial action pursuant to § 213.121; (3) Specify the conditions of actual or potential joint failure for which personnel must inspect, including, at a minimum, the following items: (i) Loose, bent, or missing joint bolts; (ii) Rail end batter or mismatch that contributes to the instability of the joint; and (iii) Evidence of excessive longitudinal rail movement in or near the joint, including, but not limited to: wide rail gap, defective joint bolts, disturbed ballast, surface deviations, gap between tie plates and rail, or displaced rail anchors; (4) Specify the procedures for the inspection of CWR joints that are imbedded in highway-rail crossings or in other structures that prevent a complete inspection of the joint, including procedures for the removal from the joint of loose material or other temporary material; (5) Specify the appropriate corrective actions to be taken when personnel find conditions of actual or potential joint failure, including on-foot follow-up inspections to monitor conditions of potential joint failure in any period prior to completion of repairs; (6) Specify the timing of periodic inspections, which shall be based on the configuration and condition of the joint; (7) Specify the recordkeeping requirements related to joint bars in CWR.

Additionally, in lieu of the requirements for the inspection of rail joints in § 213.119 (h) (1) -- (h)(6), railroads/track owners may seek approval from FRA to use alternate procedures. Railroad/track owners must submit the proposed alternate procedures and a supporting statement of justification to the Associate Administrator for Safety. FRA reviews these proposed alternate procedures to determine whether they provide an equivalent or higher level of safety than the requirements in paragraphs (h)(1) through (h) (7) of this section. If the Associate Administrator finds that the proposed alternate procedures provide an equivalent or higher level of safety than the requirements in paragraphs (h)(1) through (h)(7) of this section, the Associate Administrator will approve the alternate procedures by notifying the track owner in writing. The Associate Administrator will specify in the written notification the date on which the procedures will become effective and, after that date, the track owner must comply with the procedures. If the Associate Administrator determines that the alternate procedures do not provide an equivalent level of safety, the Associate Administrator will disapprove the alternate procedures in writing, and the track owner must continue to comply with the

requirements in paragraphs (h)(1) and (h)(7) of this section. While a determination is pending with the Associate Administrator on a request submitted pursuant to paragraph (h)(8) of this section, the track owner must continue to comply with the requirements contained in paragraphs (h)(1) through (h)(7) of this section.

Under this final rule, the requirement under § 213.119(h)(7) for generating a Joint Bar Fracture Report (Fracture Report) for every cracked or broken CWR joint bar that the track owner discovers during the course of an inspection has been eliminated to reduce burden on railroads/track owners. Under former paragraph (h)(7)(ii)(C) of this section any track owner, after February 1, 2010, could petition FRA to conduct a technical conference to review fracture report data submitted through December 2009 and assess the necessity for continuing to collect this data. One Class I railroad submitted a petition to FRA, and on October, 26, 2010, a meeting of the RSAC Track Standards Working Group served as a forum for a technical conference to evaluate whether there was a continued need for the collection of these reports. The Group ultimately determined that the reports were costly and burdensome to the railroads and their employees, while providing little useful research data to prevent future failures of CWR joint bars. The Group found that Fracture Reports were not successful in helping to determine the root cause of CWR joint bar failures because the reports gathered only a limited amount of information after the joint bar was already broken.

Under § 213.119(j), track owners must prescribe and comply with recordkeeping requirements necessary to provide an adequate history of track constructed with continuous welded rail (CWR). FRA inspectors review records of track constructed with CWR to ensure that these records include the following information: (1) Rail temperature, location and date of CWR installations. These records must be kept for one year; and (2) A record of any CWR installation or maintenance work that does not conform with the written procedures. Such record must include the location of the rail and be maintained until the CWR is brought into conformance with such procedures.

Railroad employees use the CWR procedures manuals required at every job site under § 213.119(k) as an educational and compliance tool to better understand and carry out their duties related to the installation, inspection, and maintenance of CWR track in accordance with their employer's/track owner's prescribed program. Each CWR procedures manual must contain a copy of the track owner's CWR procedures and all revisions, appendices, updates, and reference materials. Employees can readily consult these manuals to clarify any questions they may have regarding CWR track and to ensure that they are correctly carrying out the necessary procedures. Additionally, in the event of an accident/incident, the required CWR procedures manuals provide another resource that FRA investigators can use in determining the cause(s) of the accident/incident. Agency investigators can review the CWR procedures manual to establish that they are complete and current, and can then compare actual employee actions related to CWR track to the prescribed procedures of the track owner's/railroad's CWR manual to ascertain whether railroad and Federal rules were complied with.

Regarding Gage Restraint Measurement Systems (GRMS), FRA uses the information collected to ascertain those line segments on which GRMS technology – supplemented by the use of Portable Track Loading Fixtures (PTLF) – needs to be implemented by track owners. Specifically, FRA reviews the information to ensure that certain minimal data are provided by railroads, including the segment's timetable designation milepost limits, track class, million gross tons of traffic per year, and any other identifying characteristics of the segment. FRA uses the information provided to evaluate the appropriateness of implementing GRMS technology on a given segment of track. FRA uses the technical data provided to ensure that minimum GRMS design requirements have been met and that GRMS vehicles have been properly calibrated so that the integrity of the data they provide is maintained.

FRA also uses the information collected to ensure that track owners provide training in GRMS technology to all persons designated as fully qualified under § 213.7 and whose territories are subject to the requirements of this section. Additionally, FRA reviews GRMS training programs submitted by track owners to verify these programs address the following areas: (1) Basic GRMS procedures; (2) Interpretation and handling of exception reports generated by the GRMS vehicle; (3) Locating and verifying defects in the field; (4) Remedial action requirements; (5) Use and calibration of the PTLF; and (6) Recordkeeping requirements. Moreover, FRA reviews records of the two most recent GRMS inspections at locations meeting the requirements specified in section 213.241(b) of this Part to ascertain the location and nature of each First Level exception and the nature and date of initiated remedial action, if any, for each First Level exception identified.

## Other Track Safety Information

Under § 213.4, FRA uses the information collected to ensure that railroads properly identify a segment(s) of track as excepted either in their timetables, special instructions, general orders, or other appropriate records. When a piece of track is designated excepted that is not listed in its timetables, a railroad will issue special instructions or a general order identifying the excepted track so that its employees know what procedures or practices to follow. Also, FRA uses the information collected to verify that the appropriate FRA Regional Office has been notified by the railroad, at least 10 days in advance, when a segment of track is removed from excepted status. Ensuring the safety of railroad employees, and the traveling public is FRA's paramount concern.

Under § 213.5, FRA uses the information collected to verify that the agency is properly informed in writing, at least 30 days in advance, when a track owner assigns responsibility for the track to another person by lease or otherwise. FRA reviews the notifications provided by railroads to make sure essential information is transmitted to the agency, including the following: (1) The name and address of the track owner; (2) The name and address of the person to whom responsibility is assigned (assignee); (3) A statement of the exact relationship between the track owner and the assignee; (4) A

precise identification of the track; (5) A statement as to the competence and ability of the assignee to carry out the duties of the track owner under this part; and (6) A statement signed by the assignee acknowledging the assignment to him of responsibility for purposes of compliance with this part. In order to carry out its many duties and to enforce compliance with this part, such information is critical to FRA and its inspectors. Under § 213.7, FRA reviews written records to ensure that qualified individuals are employed (designated) by railroads to inspect track for defects and to supervise restorations and renewals of track under traffic conditions. Such designated persons must have the following qualifications: (1) At least one (1) year of supervisory experience in railroad track maintenance; or a combination of supervisory experience in track maintenance and training from a course in track maintenance or from a college level educational program related to track maintenance; (2) Demonstrated to the track owner that he (i) knows and understands the requirements of this part; (ii) can detect deviations from those requirements; and (iii) can prescribe appropriate remedial action to correct or safely compensate for those deviations; and (3) Possesses written authorization from the track owner to prescribe remedial actions to correct or safely compensate for deviations from the requirements in this part.

Under § 213.17, FRA reviews exemption petitions to see if it is safe and in the public interest to grant exemptions from any or all requirements prescribed in this Part to a railroad.

Under § 213.57, FRA uses the information collected to ensure that the track owner notifies the agency at least 30 calendar days in advance before a proposed implementation of the higher curving speeds allowed under the formula specified in paragraph (c) of this section. This notification must be in writing and must contain, at a minimum, the following information: (i) A complete description of the class of equipment involved, including schematic diagrams of the suspension systems and the location of the center of gravity above top of rail; (ii) A complete description of the test procedure and instrumentation used to qualify the equipment and the maximum values for wheel unloading and roll angles which were observed during testing; (iii) Procedures or standards in effect which relate to the maintenance of the suspension system for the particular class of equipment; and (iv) Specific track locations where the higher curving speeds are proposed to be implemented.

Under revised § 213.237, currently, Classes 4 and 5 track, as well as Class 3 track over which passenger trains operate, are required to be tested for internal rail defects at least once every accumulation of 40 million gross tons (mgt) or once a year (whichever time is shorter), and Class 3 track over which passenger trains do not operate are required to be tested at least once every accumulation of 30 mgt or once per year (whichever time is longer). When this standard was drafted, railroads were already initiating and implementing the development of a performance-based risk management concept for determination of rail inspection frequency that is often referred to as the "self-adaptive scheduling method." Under this method, inspection frequency is established based on

several factors, including the total detected defect rate per test, the rate of service failures between tests, and the accumulated tonnage between tests. The railroads then utilize this information to generate and maintain a service failure performance target. The changes to this section in the rule codify standard industry good practices.

Under § 213.238, FRA is adding this section to require that each provider of rail flaw detection have a documented training program to ensure that a flaw detection equipment operator is qualified to operate each of the various types of equipment currently utilized in the industry for which he or she is assigned. This section codifies current industry practice. Consequently, there is no burden associated with it.

The rail inspection process is normally performed internally by the railroad or contracted to a service company that specializes in development of flaw detection equipment. Currently in the United States there are three railroads that perform all or part of their rail inspection programs. These are Union Pacific, Canadian National, and Norfolk Southern. There are also three primary service companies that contract this specialized service to the railroads. They are Sperry Rail Service, Herzog Companies, and Nordco Industries. Each provider of the inspection process has in place a process for training the personnel to operate this type of specialized equipment. However, FRA proposes this section to establish minimal training requirements to ensure that a flaw detection equipment operator is fully qualified to operate the various types of equipment currently utilized in the industry, and that proper training is provided in the operation of newly developed technologies. This requirement will also prevent a company from developing new technology and contract the service to the railroad without having a documented training program in place.

Under § 213.241, track owners to which this part applies must keep a record of each inspection required to be performed on its track under this subpart. FRA reviews this information to ensure that track inspections are completed as required and to ensure that essential records are maintained and available to its inspectors so they can carry-out their duties. Federal and State investigators examine these inspection records to determine a railroad's compliance with the inspection frequency requirement of the Track Safety Standards and to verify that persons assigned to inspect tracks have been properly designated. By comparison of remedial action notations on the records with actual track conditions, it is possible for Federal and State investigators to judge the quality of railroad performed inspections. The railroads employ some 5,000 persons who are routinely engaged in track inspection, and careful review of these records may reveal weaknesses, if there are any, in the railroad's inspection and maintenance program or discrepancies in employee designation. In particular, FRA reviews these records to ensure that they specify the date of inspection, the location and nature of any internal defects found, the remedial action(s) taken and the date thereof, and the location of any intervals of track not tested per § 213.237(d). The track owners must retain these records for at least two years after the inspection and for one year after remedial action is taken. In the event of an accident/incident, these records provide extremely valuable

information, particularly if a problem with track caused the unfortunate event. The absence of these inspection records would substantially harm the Federal Government's railroad safety program.

Moreover, railroads too use the information mentioned above. Railroad companies initially use inspection reports/records to see that tracks are inspected periodically; to confirm that the inspectors are properly qualified in carrying out their duties; and to ensure that tracks are in safe condition for train operations. Railroad companies also use these reports/records for maintenance planning, particularly where defective track is discovered and where repetitive unsafe conditions occur.

In this rule, FRA requires that the railroad's rail inspection records include the date of inspection, track identification and milepost for each location tested, type of defect found and size if not removed prior to traffic, and initial remedial action as required by § 213.113. FRA also requires that all tracks that do not receive a valid test are documented in the railroad rail inspection records. This more detailed information helps railroads address and correct track problems and provides invaluable information in the event of a train derailment, collision, or other train accident/incident.

#### 3. Extent of automated information collection.

FRA strongly endorses and highly encourages the use of advanced information technology, wherever feasible, to reduce burden on respondents. The Track Safety regulations permit great flexibility in the methods employed to establish employee qualifications and to determine track conditions, and only specify information which must be contained in the records. The form of that record is discretionary and entities may use any medium capable of displaying information, including electronic recordkeeping.

The rule contains a provision for maintaining and retrieving electronic records of track inspections. Patterned after an experimental program successfully tried by the former Atchison Topeka & Santa Fe Railroad with oversight by FRA, the provision in subsections 213.119 and 213.241(e) allow each railroad to design its own electronic system as long as the system meets the specified criteria to safeguard the integrity and authenticity of each record. Currently, approximately 75% of all responses are now submitted/collected electronically by railroads/track owners.

## 4. <u>Efforts to identify duplication</u>.

Records of track inspection results describe a continuously changing condition at any given moment in time. Records of qualified track inspectors are unique to a specific railroad property, and no duplication of information exists. Consequently, there is no duplication of information because this information is new.

As noted previously, the information regarding GRMS systems involves a relatively recent technology, and, therefore, there is no possibility of duplication.

The data collected under this rule or similar data are not available from any other source.

#### 5. Efforts to minimize the burden on small businesses.

#### **Background**

"Small entity" is defined in 5 U.S.C. 601. Section 601(3) defines a "small entity" as having the same meaning as "small business concern" under Section 3 of the Small Business Act. This includes any small business concern that is independently owned and operated, and is not dominant in its field of operation. Section 601(4) likewise includes within the definition of "small entities" not-for-profit enterprises that are independently owned and operated, and are not dominant in their field of operation. 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." Additionally, 5 U.S.C. 601(5) defines as "small entities" governments of cities, counties, towns, townships, villages, school districts, or special districts with populations less than 50,000.

Federal agencies may adopt their own size standards for small entities in consultation with SBA and in conjunction with public comment. Pursuant to that authority, FRA has published a final statement of agency policy that formally establishes "small entities" or "small businesses" as being railroads, contractors, and hazardous materials shippers that meet the revenue requirements of a Class III railroad as set forth in 49 CFR 1201.1-1, which is \$20 million or less in inflation-adjusted annual revenues; and commuter railroads or small governmental jurisdictions that serve populations of 50,000 or less. See 68 FR 24891, May 9, 2003, codified at Appendix C to 49 CFR, part 209. The \$20 million-limit is based on the Surface Transportation Board's revenue threshold for a Class III railroad. Railroad revenue is adjusted for inflation by applying a revenue deflator formula in accordance with 49 CFR 1201.1-1.on a substantial number of small entities as a result of this final rule.

FRA regulates approximately 744 railroads. There are 7 Class I railroads and 12 Class II railroads, none of which are considered to be small. There are a total of 29 commuter/passenger railroads, including Amtrak, affected by this rule. However, most of the affected commuter railroads are part of larger public transportation agencies that receive Federal funds and serve major jurisdictions with populations greater than 50,000.

The level of costs incurred by each railroad should generally vary in proportion to the number of miles of class 3, 4, or 5 track. For instance, railroads with less track should have lower overall costs associated with implementing the standards. There are 696 Class III railroads, of which, only 58 are affected by this rule. However, FRA has

confirmation that 51 of these small railroads are already in compliance with this regulation. FRA believes that the remaining 7 Class III railroads are also in compliance, and that no small entity will be negatively impacted by this regulation. FRA published this analysis in the Initial Regulatory Flexibility Analysis (IRFA) that accompanied the Notice of Proposed Rulemaking (NPRM) and requested comments on the Analysis but did not receive any on this estimate. Even if those 7 entities were impacted, the economic impact on them would likely not be significant.

If the seven (7) small railroads that FRA assumed are in compliance with the rule are in fact not in compliance, the added costs would be minimal. FRA does not believe that 7 railroads would be a substantial number. FRA estimates that it would cost a Class III railroad \$2,000 per day to rent a rail flaw detector car. The average Class III railroad that owns class 3, 4, or 5 track has approximately 70 miles of track. FRA estimates it would take three days to inspect their entire track. The total cost per railroad would be \$6,000 per year, for the base year. Again, FRA has a high level of confidence that these railroads are already inspecting their track at least once a year. However, if these entities are not in compliance, FRA believes a cost of \$6,000 per year would not be a significant economic impact on any railroad.

Also, as previously mentioned, to reduce burden on railroads, FRA is eliminating the requirement under § 213.119(h)(7) for generating a Joint Bar Fracture Report (Fracture Report) for every cracked or broken CWR joint bar that the track owner discovers during the course of an inspection. The RSAC Working Group ultimately determined that the reports were costly and burdensome to the railroads and their employees, while providing little useful research data to prevent future failures of CWR joint bars. The Group found that Fracture Reports were not successful in helping to determine the root cause of CWR joint bar failures because the reports gathered only a limited amount of information after the joint bar was already broken. The elimination of this requirement will reduce the burden by respondents by 2,000 hours per year.

Pursuant to the Regulatory Flexibility Act (5 U.S.C. 605(b)), FRA certifies that this final rule will not have a significant economic impact on a substantial number of small entities. Although a substantial number of small railroads will be affected by the final rule, none of these entities will be significantly impacted.

## 6. <u>Impact of less frequent collection of information</u>.

If the information were not collected or collected less frequently, rail safety in the United States would be seriously jeopardized. Specifically, without the new information collected under § 213.237, FRA would not know – and not be able to determine whether it is safe – that the track owner/railroad conducted necessary rail inspections sufficient to maintain prescribed service failure target rate and if the track owner/railroad was justified in changing the designation of a rail inspection segment or establishing a new segment for track that is Class 4 or 5 track, or Class 3 track that carries regularly-scheduled

passenger trains or is a hazardous materials route and is used to determine the milepost limits for the individual rail inspection frequency. The new requirement requiring FRA approval serves to ensure that the track owner/railroad does not have the ability to freely alter a defined segment length in order to compensate for a sudden increase of detected defects and service failures which might enable them to carry out a less frequent test cycle and increase the risk of greater numbers of rail accidents/incidents. Moreover, FRA believes that altering existing railroad segment lengths without extensive data and research would be financially burdensome to individual railroads and detrimental to their established maintenance programs, without yielding significant safety benefits.

Also, without the new information collected under § 213.237, neither FRA nor rail employees would know the effective date of the new designation's effective date. FRA could not carry out its safety monitoring and enforcement program without this information. Without this information, railroad employees would not when to begin their inspection and, where necessary, remedial/repair duties. Also, without the new notification required in this section, FRA would not know when service failure target rates prescribed in paragraph (a) are not achieved and would not have necessary information about why the performance target was not achieved or any details of the track owner's/railroad's remedial action plans. Rail safety would be significantly jeopardized without this critical information.

Without the information collected under § 213.333, § 213.345, and Appendix D, there might be increased numbers of rail accidents/incidents with corresponding injuries and fatalities to railroad passengers and rail employees, as well as significant property damage to rail equipment, if FRA could not ensure the safe movement of trains relating to the interaction of rail vehicles with the track over which they travel during high speed and high cant deficiency train operations. It is especially important to collect the information under these provisions to facilitate and accelerate the safe transition to increased high speed (and high cant deficiency) train operations throughout the United States. This is a top Administration priority, and billions of dollars are now being invested to enable the United States to catch up to Asia and Europe in the availability and popularity of high speed rail travel.

Without this collection of information, there might be more derailments with corresponding injuries and fatalities to railroad personnel and passengers, as well as significant amounts of property damage, if FRA could not ensure that adequate procedures were in place to detect and correct defects in continuous welded rail (CWR) track, particularly regarding defects involving rail joints in CWR. Without this collection of information, there would be no way that FRA could ensure that railroads/track owners develop and implement plans containing procedures (or alternate procedures) which describe the scheduling and conduct of physical track inspections to detect cracks and other indications of incipient failure in CWR. Without such procedures, railroads would have no thorough and systematic way to examine CWR track and detect any of the following: (i) joint bars with visible or otherwise detectable cracks; (ii) loose, or bent, or

missing joint bolts; (iii) rail end batter or mismatch that contributes to instability of the joint; and (iv) evidence of excessive longitudinal rail movement in or near the joint, including – but not limited to – wide rail gap, defective joint bolts, or displaced anchors. Such defects could lead to an increased number of derailments, with corresponding increased casualties, if left undiscovered and uncorrected.

Without the information collected under § 213.7, § 213.118, and § 213.119, FRA would have no way to ensure that railroads have comprehensive CWR training programs and no way of knowing whether individuals designated by track owners to inspect CWR track or supervise the installation, adjustment, and maintenance of CWR track have completed the required comprehensive training course and are actually qualified to perform such duties. If unqualified individuals who had not completed the required CWR procedures recorded examinations and who had not received written authorization from track owners to prescribe remedial actions were to carry out tasks related to the installation, adjustment, and maintenance of CWR track, there might be a greater number of accidents/incidents and corresponding injuries and fatalities because trains derailed as a result of incomplete or improper work.

Without this collection of information, FRA would have no way to ensure that periodic and follow-up inspections of CWR rail and CWR rail joints were actually performed. Without the required records mandated by § 213.119, FRA would have no way to verify whether all of the approximately 360,000 rail joints nationwide have been placed in the rail joint record inventory and periodically inspected to catch and correct defects before they lead to train accidents/incidents. Without these necessary records, FRA would lose an extremely valuable tool to ensure compliance with this regulation and FRA's overall safety program.

Without the information collected under § 213.119(k) that requires CWR manuals containing the track owner's CWR procedures, all revisions, appendices, updates, and reference materials related thereto at ever job site where personnel are assigned to install, inspect, and maintain CWR, railroad supervisors and employees would be deprived of an essential and authoritative resource to answer questions, resolve problems, and clarify proper procedures to ensure that all CWR work is done completely and correctly. Without these completely current CWR procedures manuals, supervisors and their employees might perform CWR work that they believed was done completely and correctly but which did not actually follow their employers' requirements or Federal safety regulatory requirements. This could lead to increased numbers of accidents/incidents on CWR track.

Without this collection of information, there would be no way to facilitate and monitor the implementation of the Gage Restrain Measurement System (GRMS) technology. Presently, the maintenance decisions which determine crosstie and rail fastener replacement within the industry rely heavily on visual inspections made by maintenance personnel whose subjective knowledge is based on varying degrees of experience and

training. The subjective nature of these inspections sometimes results in inconsistent determinations about the ability of individual crossties and rail fasteners to maintain adequate gage restraint. GRMS technology offers a better, more objective method to determine the ability of crossties and rail fasteners to maintain adequate gage restraint. It is well known within the rail industry that crossties of questionable condition left too long can cause wide-gage derailments. By collecting the required GRMS information, FRA can ensure the following: that GRMS is implemented on appropriate segments of track on a regional (eventually a national) basis; that GRMS design requirements have been met; that GRMS vehicles have been properly calibrated so that the integrity of the data they provide is maintained; and that suitable GRMS training programs have been established by track owners so that persons fully qualified under §213.7 are properly trained in this new technology. FRA's facilitation of the implementation of GRMS technology serves to improve rail safety by reducing the likelihood of wide-gage derailments caused by crossties and rail fasteners which had not been replaced in a timely manner.

Other information collected and reviewed by FRA as a result of the Track Safety Standards, particularly written records, enhance rail safety by ensuring that track owners designate only qualified persons to inspect and maintain track, and to supervise restorations and renewals of track under traffic conditions. The list of qualified persons to inspect or repair track is updated as new employees become qualified. These individuals must be able to demonstrate to track owners that they have the necessary experience and knowledge so that they can detect deviations from the requirements of this Part and prescribe appropriate remedial action to correct or safely compensate for those deviations. Each designated individual, including contractor personnel engaged by the track owner, must have written authorization from the track owner to prescribe remedial actions, and must have successfully completed a recorded examination. Consequently, these persons will better be able to identify rail defects and rail mismatches; determine the condition of crossties; evaluate track surface and alignment; ascertain gage restraint; and discern the maximum distance between rail ends over which trains may be allowed to pass. This, in turn, will help to reduce the number of accidents/incidents and corresponding injuries, deaths, and property damage.

Inspection records are extremely important and are used by Federal and State investigators in the enforcement of the Track Safety Standards, and thus help promote rail safety. Track inspection records must indicate which track(s) are traversed by a vehicle that allows qualified persons to visually inspect the structure for compliance with this Part and which track(s) are inspected by foot, as outlined in paragraph (b)(2) of § 213.233. Records must be prepared on the day the inspection is made, and must be signed by the person making the inspection. Further, records must specify the track inspected, date of inspection, location and nature of any deviation from the requirements of Part 213, the location of any intervals of track not tested per § 213.237(d), and the remedial action taken by the person making the inspection. Track owners are required to retain inspection records for at least two years after the actual inspection and for one year after the remedial action is taken. The frequency of inspection is related to the rate of

track degradation, and a relaxation of that frequency would increase the risk of an accident caused by a defect that had not been detected. In the event of a train accident/incident, particularly one implicating track structure, these inspection records provide invaluable investigatory assistance in determining the exact cause(s) of the accident/incident and also provide keen insight in designing appropriate remedial measures/programs.

In sum, the information collected aids FRA in its primary mission, which is to promote and enhance rail safety throughout the nation.

## 7. <u>Special circumstances</u>.

Under § 213.233, track inspections must be made in accordance with the following schedule: (1) Excepted track and Class 1, 2, and 3 track (main track and sidings) must be inspected weekly with at least three calendar days interval between inspections, or before use, if the track is used less than once a week, or twice weekly with at least one calendar day interval between inspections, if the track carries passenger trains or more than 10 million gross tons of traffic during the preceding calendar year; (2) Excepted track and Class 1, 2, and 3 track (other than main track and sidings) must be inspected monthly with at least 20 calendar days interval between inspections; and (3) Class 4 and 5 track must be inspected twice weekly with at least one calendar day interval between inspections. Inspection records are required to be kept by track owners under § 213.241, and each record of an inspection must be prepared on the day the inspection is made. Also, under § 213.341, initial inspection of new field welds, either those joining the ends of CWR strings or those made for isolated repairs, must be conducted not less than one day and not more than 30 days after the welds have been made.

All other information collection requirements are in compliance with this section.

## 8. <u>Compliance with 5 CFR 1320.8</u>.

In accordance with the Paperwork Reduction Act of 1995, Pub.L. No.104-13, § 2, 109 Stat. 163 (1995) (codified as revised at 44 U.S.C. §§ 3501-3520), and its implementing regulations, 5 CFR Part 1320, FRA published a notice in the <u>Federal Register</u> on November 16, 2016, soliciting public comments on these information collection requirements. <u>See</u> 81 FR 80714. FRA received <u>no</u> comments in response to this Notice.

## 9. <u>Payments or gifts to respondents.</u>

There are no monetary payments or gifts made to respondents associated with the information collection requirements contained in this final rule.

## 10. <u>Assurance of confidentiality</u>.

Information collected is not of a confidential nature, and FRA pledges no confidentiality.

## 11. <u>Justification for any questions of a sensitive nature</u>.

There are no questions of a sensitive nature in this collection of information. The GRMS information collection requirements pertain to technical data provided to FRA or to appropriate persons designated as fully qualified under § 213.7. The recordkeeping requirement in §§§ 213.7, 213.119, and 213.305 contain only names of qualified persons and the basis of their qualification. The record of track inspection results required by §§ 213.119, 213.241, and 213.369 contains nothing of a personal nature.

#### 12. Estimate of burden hours for information collected.

Based on the latest agency data, the total number of railroads operating in the United States on the general system of transportation is now 744. There are an additional 57 railroads not on the general system of transportation (such as tourist, historic, excursion, and scenic railroads).

## § 213.4 Excepted track

A track owner may designate a segment of track as excepted track provided that –

(a) The segment is identified in the timetable, special instructions, general order, or other appropriate records which are available for inspection during regular business hours.

Railroads currently list all excepted track in their timetables, which are usually issued once a year or in some cases twice a year. When a piece of track is designated excepted that is not listed in their timetables, a railroad will issue special instructions or general order identifying the excepted track. FRA estimates that this will occur approximately 20 times annually. It is estimated that it will take approximately 15 minutes for a railroad to prepare an order and issue it to all concerned. Total annual burden for this requirement is five (5) hours.

Respondent Universe: 236 railroads (7 class

I, 229 class II & class IIIs)

Burden time per response: 15 minutes
Frequency of Response: On occasion

Annual number of Responses: 20 orders

Annual Burden:

5 hours

 Calculation:
 20

 orders
 x .25

 hr. = 5
 hours

(b) A track owner must advise the appropriate FRA Regional Office at least 10 days prior to removal of a segment of track from excepted status.

FRA expects this to happen approximately 15 times a year. The notification can be either by phone or letter. Since it is estimated that a phone call will take approximately five (5) minutes per notification while a letter will take approximately 15 minutes per notifications, FRA believes an average of 10 minutes per notification is fairly accurate. Total annual burden for this requirement is three (3) hours.

Respondent Universe: 236 railroads (7 class

I, 229 class II & class IIIs)

Burden time per response: 10 minutes
Frequency of Response: On occasion
Annual number of Responses: 15 notifications

Annual Burden:

3 hours

<u>Calculation</u>:

ations x 10 min. = 3 hours

15 notific Total annual burden for this entire requirement is eight (8) hours (5 + 3).

## § 213.5 Responsibility of track owners.

If an owner of track to which this part applies assigns responsibility for the track to another person (by lease or otherwise), written notification of the assignment must be provided to the appropriate FRA Regional Office at least 30 days in advance of the assignment. The notification may be made by any party to that assignment, but must be in writing and include the following:

- (1) The name and address of the track owner;
- (2) The name and address of the person to whom responsibility is assigned (assignee);
- (3) A statement of the exact relationship between the track owner and the assignee;
- (4) A precise identification of the track;
- (5) A statement as to the competence and ability of the assignee to carry out the duties of the track owner under this part; and
- (6) A statement signed by the assignee acknowledging the assignment to him of responsibility for purposes of compliance with this part.

FRA estimates that approximately 10 notifications will be forwarded to FRA annually. It is estimated that it will take a railroad approximately eight (8) hours to prepare its notification, review and approve it, and forward it to FRA. Total annual burden for this requirement is 80 hours.

Respondent Universe: 744 railroads (all

class I, class II, and class III)

Burden time per response: 8 hours
Frequency of Response: On occasion
Annual number of Responses: 10 notifications

Annual Burden:

L			
П	υι	115	)

**Calculation:** 

10 notific ations x 8 hrs. = 80 hours

# § 213.7 Designation of qualified persons to supervise certain renewals and inspect track.

- (a) Each track owner to which this part applies shall designate qualified persons to supervise restorations and renewals of track under traffic conditions. Each person designated must have
  - (1) At least
    - (i) 1 year of supervisory experience in railroad track maintenance; or
    - (ii) A combination of supervisory experience in track maintenance and training from a course in track maintenance or from a college level educational program related to track maintenance;
  - (2) Demonstrated to the owner that he or she
    - (i) Knows and understands the requirements of this part;
    - (ii) Can detect deviations from those requirements; and
    - (iii) Can prescribe appropriate remedial action to correct or safely compensate for those deviations; and
  - (2) Written authorization from the track owner to prescribe remedial actions to correct or safely compensate for deviations from the requirements in this part.
- (b) Each track owner to which this part applies shall designate qualified persons to inspect track for defects. Each person designated must have –

- (1) At least
  - (i) 1 year of experience in railroad track inspection; or
  - (ii) A combination of experience in track inspection and training from a course in track inspection or from a college level educational program related to track inspection;
- (2) Demonstrated to the owner that he or she
  - (i) Knows and understands the requirements of this part;
  - (ii) Can detect deviations from those requirements; and
  - (iii) Can prescribe appropriate remedial action to correct or safely compensate for those deviations; and
- (3) Written authorization from the track owner to prescribe remedial actions to correct or safely compensate for deviations from the requirements of this part, pending review by a qualified person designated under paragraph (a) of this section.

## Designations (fully qualified) under paragraphs (a) and (b):

Approximately 80,000 persons are employed by railroads in the inspection and maintenance of the track and structures with an estimated 20,000 of them possessing the necessary qualifications to be designated by the railroad as qualified persons. Approximately 7.5 % of that number (1,500) would be added in any one year at an estimated man-hour effort of less than 10 minutes each. The actual frequency of response varies with employee turnover. Some lists may be updated several times a year in order to be current, and some may not change all year. Based on current information, total annual burden for this requirement is 250 hours.

## Respondent Universe:

744 railroa ds (all class I, class II, &

class IIIs) Burden time per response: 10 minutes Frequency of Response: On occasion Annual number of Responses: 1,500 names Annual Burden: 250 hours **Calculation:** 1,500 names x 10 min. = 250

(c) Individuals designated under paragraphs (a) or (b) of this section who inspect continuous welded rail (CWR) track or supervise the installation, adjustment, and maintenance of CWR track in accordance with the written procedures of the track owner must have:

hours

- (1) Current qualifications under either paragraph (a) or (b) of this section:
- (2) Successfully completed a comprehensive training course specifically

developed for the application of written CWR procedures issued by the track owner.

FRA expects 10,000 employees will successfully complete a comprehensive training course specifically developed for the application of written CWR procedures, and will be able to demonstrate to the track owner that he/she knows and understands the requirements of those written CWR procedures; can detect deviations from those requirements; and can prescribe appropriate remedial action to correct or safely compensate for those deviations. It is estimated that it will take approximately four (4) hours to complete the comprehensive training course and demonstrate knowledge of the written CWR procedures. Total annual burden for this requirement is 40,000 hours.

Respondent Universe: 37 railroads (7 Class I, 30 Class

II and Class IIIs)

Burden time per response: 4 hours Frequency of Response: On occasion

Annual number of responses: 10,000 trained employees

Annual Burden: 40,000 hours

**Calculation:** 10,000 trained employees x 4 hrs. = 40,000

hours

- (3) Demonstrated to the track owner that the individual:
- (i) Knows and understands the requirements of those written CWR procedures:
- (ii) Can detect deviations from those requirements; and
- (iii) Can prescribe appropriate remedial action to correct or safely compensate for those deviations; and
- (3) Written authorization from the track owner to prescribe remedial actions to correct or safely compensate for deviations from the requirements in those procedures and successfully completed a recorded examination on those procedures as part of the qualification process.

FRA expects 10,000 employees will receive written authorization from track owners to prescribe remedial actions to correct or safely compensate for deviations from the requirements in the CWR procedures after successfully completing a recorded examination on those procedures. It is estimated that it will take approximately 10 minutes to complete each written authorization and approximately 60 minutes to complete each recorded examination. Total annual

burden for this requirement is 11,667 hours.

Respondent Universe: 37 railroads (7 Class I, 30 Class

II and Class IIIs)

Burden time per response: 10 minutes + 60 minutes

Frequency of Response: On occasion

Annual number of responses:

10,000 written authorizations

+ 10,000 recorded examinations

Annual Burden: 11,667 hours

calcul ation: 10,000 written authori zations x 10 min. + 10,000 recorde d

examin ations x 60 min. = 11,667 hours

- (d) Persons not fully qualified to supervise certain renewals and inspect track as outlined in paragraphs (a) through (c) of this section, but with at least one year of maintenance-of-way or signal experience, may pass trains over broken rails and pull aparts provided that
  - (1) The track owner determines the person to be qualified and, as part of doing so, trains, examines, and re-examines the person periodically within two years after each prior examination on the following topics as they

relate to the safe passage of trains over broken rails or pull aparts: rail defect identification, crosstie condition, track surface and alinement, gage restraint, rail end mismatch, joint bars, and maximum distance between rail ends over which trains may be allowed to pass. The sole purpose of the examination is to ascertain the person's ability to effectively apply these requirements and the examination may not be used to disqualify the person from other duties. A minimum of four hours training is required for initial training;

- (2) The person deems it safe and train speeds are limited to a maximum of 10 mph over the broken rail or pull apart;
- (3) The person shall watch all movements over the broken rail or pull apart and be prepared to stop the train if necessary; and
- (4) Person(s) fully qualified under § 213.7 are notified and dispatched to the location promptly for the purpose of authorizing movements and effecting temporary or permanent repairs.

Currently, paragraph (c)(4) represents a usual and customary procedure practiced by all railroads and would not, therefore, incur any new paperwork burden.

FRA expects 1,000 persons to be designated as partially qualified initially. Thereafter, the actual frequency of response will vary with employee turnover and the requirement for re-qualification within two years after each prior qualification. Again, it is estimated that it will take approximately 10 minutes to designate persons as partially qualified. Total annual burden for this requirement is 167 hours.

Respondent Universe: 37 railroads (7 Class I, 30 Class

II and Class IIIs)

Burden time per response: 10 minutes Frequency of Response: On occasion

Annual number of responses:

1,000 names

Annual Burden: 167 hours

Calcul ation: 1,000 names x 10

- (e) With respect to designations under paragraphs (a) through (d) of this section, each track owner must maintain written records of
  - (1) Each designation in effect;
  - (2) The basis for each designation; and
  - (3) Track inspections made by each designated qualified person as required by § 213.241. These records shall be kept available for inspection or copying by the Federal Railroad Administration during regular business hours.

This basic requirement has been in existence since 1972. The only new paperwork is miniscule and involves updating the current list maintained by the railroads and adding any names of employees who would now be designated as partially qualified under the requirements of newly added paragraph (c) of this section.

Total annual burden for this entire requirement is 52,084 hours (250 + 40,000 + 11,667 + 167).

#### § 213.17 Waivers.

Any owner of track to which this part applies, or other person subject to this part, may petition the Federal Railroad Administrator for a waiver from any or all requirements prescribed in this Part. Each petition for waiver must be filed in the manner and contain the information required by Part 211 of this chapter.

FRA estimates that it will receive approximately six (6) waiver petitions annually. It is estimated that it will take a railroad approximately 72 hours to prepare its petition and forward it to FRA. Total annual burden for this requirement is 432 hours.

Respondent Universe: 744 railroads (all Class I, Class II, and Class III RRs)

Burden time per response: 72 hours
Frequency of Response: On occasion
Appeal number of Responses: 6 patitions

Annual number of Responses: 6 petitions

Annual Burden:

432 hours

**Calculation:** 

6
petitio
ns x 72
hrs. =
432
hours

#### § 213.57 Curves; elevation and speed limitations.

- A. (d) Each vehicle type must be approved by FRA to operate on track with a qualified cant deficiency, E<sub>u</sub>, greater than 3 inches. Each vehicle type must demonstrate, in a ready-for-service load condition, compliance with the requirements of either paragraph (d)(1) or (d) (2) of this section.
  - (1) When positioned on a track with a uniform superelevation equal to the proposed cant deficiency:
  - (i) No wheel of the vehicle type unloads to a value less than 60 percent of its static value on perfectly level track; and (ii) For passenger cars, the roll angle between the floor of the equipment and the horizontal does not exceed 8.6 degrees; or
  - (2) When operating through a constant radius curve at a constant speed corresponding to the proposed cant deficiency, and a test plan is submitted to and approved by FRA in accordance with § 213.345(e) and (f):
  - (i) The steady-state (average) load on any wheel, throughout the body of the curve, is not less than 60 percent of its static value on perfectly level track; and
  - (ii) For passenger cars, the steady-state (average) lateral acceleration measured on the floor of the car body does not exceed 0.15g.

The burden for test plans is included under that of § 213.345(e) and (f) below. Consequently, there is no additional burden associated with the above requirement.

- (e) The track owner or railroad shall transmit the results of the testing specified in paragraph (d) of this section to FRA's Associate Administrator for Railroad Safety/Chief Safety Officer requesting approval for the vehicle type to operate at the desired curving speeds allowed under the formula in paragraph (b) of this section. The request shall be made in writing and shall contain, at a minimum, the following information —
- (1) A description of the vehicle type involved, including schematic diagrams of the suspension system(s) and the estimated location of the center of gravity above top of rail;
- (2) The test procedure, including the load condition under which the testing was performed, and description of the instrumentation used to qualify the vehicle type, as well as the maximum values for wheel unloading and roll angles or accelerations that were observed during testing; and
- (3) For vehicle types not subject to parts 229 or 238 of this chapter, procedures or standards in effect that relate to the maintenance of all safety-critical components of the suspension system(s) for the particular vehicle type. Safety-critical components of the suspension system are those that impact or have significant influence on the roll of the carbody and the distribution of weights on the wheels.

FRA estimates that approximately two (2) requests will be received annually. It is estimated that each request will take approximately 40 hours to complete and forward to FRA. Total annual burden for this requirement is 80 hours.

Respondent Universe:	744 railroads (all Class I, Class II, and Class III)	
Burden time per response:	hours	40
Frequency of Response:	occas:	On ion
Annual number of Responses: Annual Burden:	2 requests	
		80 hours
Calculation:		2

request s x 40 hrs. = 80 hours

B. (f) In approving the request made pursuant to paragraph (e) of this section, FRA may impose conditions necessary for safely operating at the higher curving speeds. Upon FRA approval of the request, the track owner or railroad shall notify FRA in writing no less than 30 calendar days prior to the proposed implementation of the approved higher curving speeds allowed under the formula in paragraph (b) of this section. The notification shall contain, at a minimum, identification of the track segment(s) on which the higher curving speeds are to be implemented.

Given the above two requests, FRA estimates that approximately two (2) notifications will be sent to FRA under this requirement. It is estimated that it will take the track owner or railroad approximately eight (8) hours to complete each notification and it to FRA. Total annual burden for this requirement is 16 hours.

Respondent Universe: 744 railroads (all

Class I, Class II, and Class III)

8 hours On occasion

Frequency of Response: On occa Annual number of Responses: 2 notifications

Annual Burden:

Burden time per response:

16 hours

**Calculation:** 2 notifications x 8 hrs. = 16 hours

- C. (g) The documents required by this section must be provided to FRA by:
  - (1) The track owner; or
  - (2) A railroad that provides service with the same vehicle type over trackage of one or more track owner(s), with the written consent of each affected track owner.

FRA estimates that approximately two (2) written consents of other track owners will be

obtained by track owners/railroads under the above requirement. It is estimated that it will take approximately 45 minutes to obtain the necessary written consent. Total annual burden for this requirement is two (2) hours.

Respondent Universe: 744 railroads (all

Class I, Class II, and Class III)

Burden time per response: 45 minutes Frequency of Response: On occasion Annual number of Responses: 2 written consents

Annual Burden:

2 hours

**Calculation:** 2 written consents x 45 min. = 2 hours

(h)(1) Vehicle types permitted by FRA to operate at cant deficiencies,  $E_u$ , greater than 3 inches but not more than 5 inches shall be considered qualified under this section to operate at those permitted cant deficiencies for any track segment. The track owner or railroad shall notify FRA in writing no less than 30 calendar days prior to the proposed implementation of such curving speeds in accordance with paragraph (f) of this section.

The burden for this requirement is already included under that of § 213.57(f) above. Consequently, there is no additional burden associated with the above requirement.

Total annual burden for this entire requirement is 98 hours (80 + 16 + 2).

#### § 213.110 Gage restraint measurement systems.

A. (a) A track owner may elect to implement a Gage Restraint Measurement System (GRMS), supplemented by the use of a Portable Track Loading Fixture (PTLF), to determine compliance with the crosstie and fastener requirements specified in §§213.109 and 213.127 provided that: (1) The track owner notifies the appropriate FRA Regional office at least 30 days prior to the designation of any line segment on which GRMS technology will be implemented; and (2) The track owner notifies the appropriate FRA Regional office at least 10 days prior to the removal of any line segment from GRMS designation. Initial notification under

paragraph (a)(1) of this section shall include: (1) Identification of the line segment(s) by timetable designation, milepost limits, class of track, or other identifying criteria; and (2) The most recent record of million gross tons of traffic per year over the identified segment(s). The track owner shall also provide to FRA sufficient technical data to establish compliance with the minimum design requirements of a GRMS vehicle:

- (2) Gage restraint shall be measured between the heads of rail –
- (i) At an interval not exceeding 16 inches;
- (ii) Under an applied vertical load of no less than 10 kips per rail; and
- (iii) Under an applied lateral load which provides for a lateral/vertical load ratio between 0.5 and 1.25, and a load severity greater than 3kips but less than 8 kips per rail.

FRA estimates that approximately one (1) notification will be provided to FRA Regional offices under the first part of this requirement. FRA also estimates that approximately <u>once</u> a year track owners will provide the necessary technical data under the second part of this requirement. It is estimated that it will take approximately 45 minutes to complete each notification and forward it to the appropriate Regional office, and approximately four (4) hours to gather the necessary GRMS technical data. Total annual burden for this requirement is five (5) hours.

Respondent Universe: 744 railroads (all

Class I, Class II, and Class III)
Burden time per response:
45 minutes + 4 hours

Frequency of Response: On occasion

Annual number of Responses: 1 notification + 1 technical report

Annual Burden:

5 hours

**<u>Calculation</u>**: 1 notification x 45 min. + 1 report x 4 hrs. = 5 hours

B. (g) The GRMS vehicle shall be capable of producing output reports that provide a trace, on a constant-distance scale, of all parameters specified in paragraph (l) of this section.

FRA estimates that approximately 50 output reports will be produced each year under the above requirement. The output reports are generated in real time. It is estimated that it

will take approximately five (5) minutes for the entire process to produce each output report. Total annual burden for this requirement is four (4) hours.

Respondent Universe: 744 railroads (all

Class I, Class II, and Class III)

Burden time per response: 5 minutes
Frequency of Response: On occasion
Annual number of Responses: 50 output reports

Annual Burden:

4 hours

50

Calculation:

output reports x 5 min. = 4 hours

C. (h) The GRMS vehicle shall be capable of providing an exception report containing a systematic listing of all exceptions, by magnitude and location, to all the parameters specified in paragraph (l) of this section. The exception reports required by this section shall be provided to the appropriate person designated as fully qualified under §213.7 prior to the next inspection required under §213.233 of this part.

FRA estimates that approximately 50 exception reports will be provided to appropriate person designated as fully qualified under §213.7 prior to the next inspection required under §213.233 of this part. Again, this report is generated in real time. It is estimated that it will take approximately five (5) minutes to complete each output report. Total annual burden for this requirement is four (4) hours.

Respondent Universe: 744 railroads (all

Class I, Class II, and Class III) 5 minutes

Burden time per response: 5 minutes
Frequency of Response: On occasion
Annual number of Responses: 50 exception reports

Annual Burden:

4 hours

**Calculation:** 

50 excepti on reports x 5

min. = 4 hours

D. (j) The track owner shall institute the necessary procedures for maintaining the integrity of the data collected by the GRMS and PTLF systems. At a minimum, the track owner shall: (1) Maintain and make available to the Federal Railroad Administration (FRA) documented calibration procedures on each GRMS vehicle which, at a minimum, shall specify a daily instrument verification procedure that will ensure correlation between measurements made on the ground and those recorded by the instrumentation with respect to loaded and unloaded gage parameters; and (2) Maintain each PTLF used for determining compliance with the requirements of this section such that the 4,000-pound reading is accurate to within five percent of that reading.

FRA estimates that approximately one (1) documented calibration procedures for GRMS vehicles will be developed and made available to FRA under this requirement. It is estimated that it will take approximately two (2) hours for each railroad to compose the required documented calibration procedure and forward it to FRA. Total annual burden for this requirement is two (2) hours.

Respondent Universe: 744 railroads (all

Class I, Class II, and Class III)

Burden time per response: 2 hours
Frequency of Response: On occasion
Annual number of Responses: 1 documented procedures

Annual Burden:

2 hours

**Calculation:** 

docum ented proced ures *x* 2 hrs.

1

= 2 hours

- E. (k) The track owner shall provide training in GRMS technology to all persons designated as fully qualified under §213.7 and whose territories are subject to the requirements of this section. The training program shall be made available to the Federal Railroad Administration (FRA) upon request. At a minimum, the training program must address the following:
  - (1) Basic GRMS procedures;
  - (2) Interpretation and handling of exception reports generated by the GRMS vehicle;
  - (3) Locating and verifying defects in the field;
  - (4) Remedial action requirements;
  - (5) Use and calibration of the PTLF; and
  - (6) Recordkeeping requirements.

FRA estimates that approximately two (2) training programs will be established and that 100 employees will be trained in five (5) training sessions under the above requirements. It is estimated that it will take approximately 16 hours to develop each training program and an additional 16 hours to conduct each training session so that all designated persons fully qualified under §213.7 are properly trained. Total annual burden for this requirement is 112 hours.

Respondent Universe: 744 railroads (all

Class I, Class II, and Class III)

Burden time per response: 16 hours Frequency of Response: On occasion

Annual number of Responses: 2 training programs + 5 training sess.

Annual Burden:

**<u>Calculation</u>**: 2 training prog. x 16 hrs. + 5 training sess. x 16 hrs =

112 hours

F. The track owner shall maintain a record of the two most recent GRMS inspections at locations which meet the requirements specified in §213.241(b) of this part. At a minimum, records shall indicate the following: (1) Location and nature of each First Level exception; and (2) Nature and date of remedial action, if any, for each exception identified in paragraph (n)(1) of this section.

FRA estimates that approximately 50 records will be maintained under this requirement. It is estimated that it will take approximately one (1) hour to complete each record. Total annual burden for this requirement is 50 hours.

Respondent Universe: 744 railroads (all

Class I, Class II, and Class III)

Burden time per response: 1 hour Frequency of Response: On occasion

Annual number of Responses: 50 records

Annual Burden:

50 hours

<u>Calculation</u>:

50 records x 1 hr. = 50 hours

Total annual burden for this entire requirement is 177 hours (5 + 4 + 4 + 2 + 112 + 50).

#### § 213.113 Defective Rails

The revised rule provides that only a person qualified under § 213.7 is required to determine that a track may continue to be utilized once a known defective condition is identified. The RITF recommended adding "or repaired" to paragraph (a)(1) to allow railroads to use recently-developed processes that remove the defective portion of the rail section and replace that portion utilizing recently-developed weld technologies commonly referred to as "slot weld" or "wide gap weld." These processes allow the remaining portion of non-defective rail to remain in the track.

The revised rule provides that railroads have a four-hour period in which to verify that a suspected defect exists in the rail section. This would apply only to suspected defects that may require remedial action. The primary purpose of the four hour delayed verification option is to assist the railroads in improving detector car utilization and production, increase the opportunity to detect larger defects, and ensure that all the rail the detector car travels over while on duty is inspected.

The Remedial Action Table and its notes have been revised. Specifically, the revisions pertain to transverse defects, and a longitudinal defect that is associated with a defective weld. Definitions of "Flattened Head" and "Compound Fissure" have been amended. The definition of "Crushed Head" has been incorporated in the Remedial Action Table.

The burden associated with qualified persons is covered under section 213.7. Consequently, there is no additional burden associated with this requirement.

### § 213.118 Continuous welded rail (CWR); plan review and approval.

- (a) Each track owner with track constructed of CWR must have in effect and comply with a plan that contains written procedures which address: the installation, adjustment, maintenance and inspection of CWR; inspection of CWR joints; and a training program for the application of those procedures.
- (b) The track owner must file its CWR plan with the FRA Associate Administrator for Safety/Chief Safety Officer (Associate Administrator). Within 30 days of receipt of the submission, FRA will review the plan for compliance with this subpart. FRA will approve, disapprove or conditionally approve the submitted plan, and will provide written notice of its determination.
- (c) The track owner's existing plan shall remain in effect until the track owner's new plan is approved or conditionally approved and is effective pursuant to paragraph (d) of this section.

FRA estimates that 100 railroads will revise their plans to include the new CWR procedures required under the above requirement. It is estimated that it will take

approximately four (4) hours to revise each plan and submit it to FRA. Total annual burden for this requirement is 400 hours.

Respondent Universe: 279 Railroads

Burden time per response: 4 hours
Frequency of Response: On occasion
Annual number of Responses: 100 revised plans

Annual Burden:

400 hours

<u>Calculation</u>: 100

revised plans x 4 hrs. = 400 hours

(d) The track owner shall, upon receipt of FRA's approval or conditional approval establish the plan's effective date. The track owner shall advise in writing FRA and all affected employees of the effective date.

FRA estimates that approximately 100 written notifications advising FRA and an additional 10,000 notifications advising affected employees will be made by track owners/railroads under the above requirement. It is estimated that it will take approximately four (4) hours to complete and send each written notification to FRA and approximately two (2) minutes to complete and provide each written notification to affected employees. Total annual burden for this requirement is 733 hours.

Respondent Universe: 279 Railroads
Burden time per response: 4 hours + 2 minutes
Frequency of Response: On occasion

Annual number of Responses: 100 written notifications + 10,000

written notifications

Annual Burden:

733 hours **Calculation:** 100 written notifications x 4 hrs. + 10,000 written notifications x 2 min. = 733 hours

(e) FRA, for cause stated, may, subsequent to plan approval or conditional approval, require revisions to the plan to bring the plan into conformity with this subpart. Notice of a revision requirement shall be made in writing and specify the basis of FRA's requirement. The track owner may, within 30 days of the revision requirement, respond and provide written submissions in support of the plan.

FRA estimates that approximately 20 plans will require revisions and, as a result, 20 written submissions will be sent to the agency in support of the plan under the above requirement. It is estimated that it will take approximately two (2) hours to complete each written submission. Total annual burden for this requirement is 40 hours.

Respondent Universe: 279 Railroads

Burden time per response: 2 hours Frequency of Response: On occasion Annual number of Responses: 20 written submissions

Annual Burden:

40 hours

**Calculation:** 20 written submissions x 2 hrs. = 40 hours

(f) FRA renders a final decision in writing. Not more than 30 days following any final decision requiring revisions to a CWR plan, the track owner must amend the plan in accordance with FRA's decision and resubmit the conforming plan. The conforming plan becomes effective upon its submission to FRA.

FRA estimates that approximately 20 plans will be amended under the above requirement. It is estimated that it will take approximately one (1) hour to complete each amended plan. Total annual burden for this requirement is 20 hours.

Respondent Universe: 279 Railroads

Burden time per response:

Frequency of Response:

Annual number of Responses:

20 amended plans

Annual Burden:

	20
	hours
Calculation:	20
	amend
	ed
	plans x
	plans x 1 hr. =
	20
	hours

Total annual burden for this entire requirement is 1,193 hours (400 + 733 + 40 + 20).

## § 213.119 Continuous welded rail (CWR); plan contents.

The track owner shall comply with the contents of the CWR plan approved or conditionally approved under 213.118. The plan shall contain the following elements –

- (a) Procedures for the installation and adjustment of CWR which include
  - (1) Designation of a desired rail installation temperature range for the geographic area in which the CWR is located; and
  - (2) De-stressing procedures/methods which address proper attainment of the desired rail installation temperature range when adjusting CWR.
- (b) Rail anchoring or fastening requirements that will provide sufficient restraint to limit longitudinal rail and crosstie movement to the extent practical, and specifically addressing CWR rail anchoring or fastening patterns on bridges, bridge approaches, and at other locations where possible longitudinal rail and crosstie movement associated with normally expected train-induced forces, is restricted.
- (c) CWR joint installation and maintenance procedures which require that –
- (1) Each rail shall be bolted with at least two bolts at each CWR joint;
- (2) In the case of a bolted joint to be installed after October 21, 2009, the track owner shall perform any one of the following within 60 days
  - (i) Weld the joint;

- (ii) Install a joint with six bolts;
- (iii) Anchor every tie 195 feet in both directions of the joint; and
- (3) In the case of a bolted joint in CWR experiencing service failure or a failed bar with a rail gap present, the track owner shall either
  - (i) Weld the joint;
  - (ii) Replace the broken bar(s), replace the broken bolts, adjust the anchors and, within 30 days, weld the joint;
  - (iii) Replace the broken bar(s), replace the broken bolts, install one additional bolt per rail end, and adjust anchors;
  - (iv) Replace the broken bar(s), replace the broken bolts, and anchor every tie 195 feet in both directions from the CWR joint; or
  - (v) Replace the broken bar(s), replace the broken bolts, add rail with provisions for later adjustment pursuant to paragraph (d)(2) of this section, and reapply the anchors.
- (d) Procedures which specifically address maintaining a desired rail installation temperature range when cutting CWR, including rail repairs, in-track welding, and in conjunction with adjustments made in the area of tight track, a track buckle, or a pull-apart. Rail repair practices shall take into consideration existing rail temperature so that —
- (1) When rail is removed, the length installed shall be determined by taking into consideration the existing rail temperature and the desired rail installation temperature range; and
- (2) Under no circumstances should rail be added when the rail temperature is below that designated by paragraph (a)(1) of this section, without provisions for later adjustment.
- (e) Procedures which address the monitoring of CWR in curved track for inward shifts of alinement toward the center of the curve as a result of disturbed track.
- (f)(1) Procedures which govern train speed on CWR track when
  - (i) Maintenance work, track rehabilitation, track construction, or any other event occurs which disturbs the roadbed or ballast section and reduces the lateral or longitudinal resistance of the track; and
  - (ii) The difference between the average rail temperature and the average rail neutral temperature is in a range that causes buckling-prone conditions to be present at a specific location; and

- (3) In formulating the procedures under paragraph (f)(1) and (f)(2) of this section, the track owner shall
  - (i) Determine the speed required, and the duration and subsequent removal of any speed restriction based on the restoration of the ballast, along with sufficient ballast re-consolidation to stabilize the track to a level that can accommodate expected train-induced forces. Ballast re-consolidation can be achieved through either the passage of train tonnage or mechanical stabilization procedures, or both; and
  - (ii) Take into consideration the type of crossties used.

The burden for the earlier one-time requirements, which have already been fulfilled, was accounted for in the previously approved submission. The burden for the new/amended requirements for CWR plans is included under that of § 213.118 above. Consequently, there is no additional burden associated with these requirements.

- (g) Procedures which prescribe when physical track inspections are to be performed.
  - (1) At a minimum, these procedures must address inspecting track to identify –
  - (i) Buckling prone conditions in CWR track, including –
  - (A) Locations where tight or kinky rail conditions are likely to occur;
  - (B) Locations where track work of the nature described in paragraph (f)(1)(i) of this section have recently been performed; and
  - (ii) Pull-apart prone conditions in CWR track, including locations where pullapart or stripped-joint rail conditions are likely to occur; and
  - (2) In formulating the procedures under paragraph (g)(1) of this section, the track owner must –
  - (i) Specify when the inspections will be conducted; and
  - (ii) Specify the appropriate remedial actions to be taken when either buckling-prone or pull-apart conditions are found.
- (h) Procedures which describe the scheduling and conduct of inspections to detect cracks and other indications of potential failures in CWR joints. In formulating the procedures under this paragraph, the track owner must
  - (1) Address the inspection of joints and the track structure at joints, including, at a minimum, periodic on-foot inspections;

- (2) Identify joint bars with visible or otherwise detectable cracks and conduct remedial action pursuant to § 213.121;
- (3) Specify the conditions of actual or potential joint failure for which personnel must inspect, including, at a minimum, the following items:
- (i) Loose, bent, or missing joint bolts;
- (ii) Rail end batter or mismatch that contributes to the instability of the joint; and
- (iii) Evidence of excessive longitudinal rail movement in or near the joint, including, but not limited to: wide rail gap, defective joint bolts, disturbed ballast, surface deviations, gap between tie plates and rail, or displaced rail anchors;
- (4) Specify the procedures for the inspection of CWR joints that are imbedded in highway-rail crossings or in other structures that prevent a complete inspection of the joint, including procedures for the removal from the joint of loose material or other temporary material;
- (5) Specify the appropriate corrective actions to be taken when personnel find conditions of actual or potential joint failure, including on-foot follow-up inspections to monitor conditions of potential joint failure in any period prior to completion of repairs.
- (6) Specify the timing of periodic inspections, which shall be based on the configuration and condition of the joint:
  - (i) Except as provided in paragraphs (h)(6)(ii) through (iv) of this section, track owners must specify that all CWR joints are inspected, at a minimum, in accordance with intervals identified in the table in this section (213.119(h)(6)(i));
  - (ii) Consistent with any limitations applied by the track owner, a passenger train conducting an unscheduled detour operation may proceed over track not normally used for passenger operations at a speed not to exceed the maximum authorized speed otherwise allowed, even though CWR joints have not been inspected in accordance with the frequency identified in paragraph (h)(6)(i) of this section, provided that:
  - (A) All CWR joints have been inspected consistent with requirements for freight service; and

- (B) The unscheduled detour operation lasts no more than 14 consecutive calendar days. In order to continue operations beyond the 14-day period, the track owner must inspect the CWR joints in accordance with the requirements of paragraph (h)(6)(i) of this section;
- (iii) Tourist, scenic, historic, or excursion operations, if limited to the maximum authorized speed for passenger trains over the next lower class of track, need not be considered in determining the frequency of inspections under paragraph (h)(6)(i) of this section.
  - (iv) All CWR joints that are located in switches, turnouts, track crossings, lift rail assembles or other transition devices on moveable bridges must be inspected on foot at least monthly, consistent with the requirements in § 213.235; and all records of those inspections must be kept in accordance with the requirements of § 213.241. A track owner may include in its § 213.235 inspections, in lieu of the joint inspections required by paragraph (h)(6)(i) of this section, CWR joints that are located in track structure that is adjacent to switches and turnouts, provided that the track owner precisely defines the parameters of that arrangement in the CWR plans.

The burden for the earlier one-time requirements, which have already been fulfilled, was accounted for in the previously approved submission. The burden for the new/amended requirements for CWR plans is included under that of § 213.118 above. Consequently, there is no additional burden associated with these requirements.

- (7) Specify the recordkeeping requirements related to joint bars in CWR, including the following:
  - (i) The track owner shall keep a record of each periodic and follow-up inspection required to be performed by the track owner's CWR plan, except for those inspections conducted pursuant to § 213.235 for which track owners must maintain records pursuant to § 213.241. The record shall be prepared on the day the inspection is made and signed by the person making the inspection. The record shall include, at a minimum, the following items: the boundaries of the territory inspected; the nature and location of any deviations at the joint from the requirements of this part or of the track owner's CWR plan, with the location identified with sufficient precision that personnel could return to the joint and identify it without ambiguity; the date of the inspection; the

- remedial action, corrective action, or both, that has been taken or will be taken; and the name or identification number of the person who made the inspection. (*Note: The burden for this requirement is included under that of § 213.119(j)(3) below.*)
- (ii) The track owner shall generate a Fracture Report for every cracked or broken CWR joint bar that the track owner discovers during the course of an inspection conducted pursuant to §§ 213.119(g), 213.233, or 213.235 on track that is required under §213.119(h)(6) (i) to be inspected.
- (A) The Fracture Report shall be prepared on the day the cracked or broken joint is discovered. The Report shall include, at a minimum: the railroad name; the location of the joint bar as identified by milepost and subdivision; the class of track; annual million gross tons for the previous calendar year; the date of the discovery of the crack or break; the rail section; the type of bar (standard, insulated, or compromise); the number of holes in the joint bar; a general description of the location of the crack or break in bar; the visible length of the crack in inches; the gap measurement between rail ends; the amount and length of rail end batter or ramp on each rail end; the amount of tread mismatch; the vertical movement of joint; and in curves or spirals, the amount of gage mismatch and the lateral movement of the joint.

The requirement under paragraph (h)(7)(ii) of this section that railroads generate a Joint Bar Fracture Report (Fracture Report) for every cracked or broken CWR joint bar that the track owner discovers during the course of an inspection has been removed. Under this section, any track owner, after February 1, 2010, could petition FRA to conduct a technical conference to review fracture report data submitted through December 2009 and assess the necessity for continuing to collect this data. One Class I railroad submitted a petition to FRA, and on October, 26, 2010, a meeting of the RSAC Track Standards Working Group served as a forum for a technical conference to evaluate whether there was a continued need for the collection of these reports. The Group ultimately determined that the reports were costly and burdensome to the railroads and their employees, while providing little useful research data to prevent future failures of CWR joint bars. The Group found that Fracture Reports were not successful in helping to determine the root cause of CWR joint bar failures because the reports gathered the information after the joint bar was already broken.

Instead, the Group recommended that a new study be conducted to determine what conditions lead to CWR joint bar failures and include a description of the overall condition of the track in the vicinity of the failed joint(s); photographic evidence of the

failed joint, track geometry (gage, alignment, profile, cross-level) at the joint location; and the maintenance history at the joint location. Two Class I railroads volunteered to participate in a new joint bar study, which is expected to provide better data to pinpoint why CWR joint bars fail. In the meantime, since FRA does not find it beneficial to retain the existing requirement for railroads to submit CWR joint bar Fracture Reports, the agency is removing it from the rule. As a result, there is no additional burden associated with this requirement.

The burden for the periodic and follow-up inspections mentioned above is included under that of § 213.119(j)(3) below. Consequently, there is no additional burden associated with this requirement.

(8)In lieu of the requirements for the inspection of rail joints contained in paragraphs (h)(1) through (h)(7) of this section, a track owner may seek approval from FRA to use alternate procedures. (i) The track owner must submit the proposed alternate procedures and a supporting statement of justification to the Associate Administrator for Safety (Associate Administrator). (ii) If the Associate Administrator finds that the proposed alternate procedures provide an equivalent or higher level of safety than the requirements in paragraphs (h)(1) through (h)(7) of this section, the Associate Administrator will approve the alternate procedures by notifying the track owner in writing. The Associate Administrator will specify in the written notification the date on which the procedures will become effective and, after that date, the track owner must comply with the procedures. If the Associate Administrator determines that the alternate procedures do not provide an equivalent level of safety, the Associate Administrator will disapprove the alternate procedures in writing, and the track owner shall continue to comply with the requirements in paragraphs (h)(1) and (h)(7) of this section. (iii) While a determination is pending with the Associate Administrator on a request submitted pursuant to paragraph (h)(8) of this section, the track owner must continue to comply with the requirements contained in paragraphs (h)(1) through (h)(7) of this section.

The burden for the above requirement is a one-time burden which has already been fulfilled. Consequently, there is no additional burden associated with this requirement.

(i) The track owner must have in effect a comprehensive training program for the application of these written CWR procedures, with provisions for annual retraining, for those individuals designated under § 213.7(c) as qualified to supervise the installation, adjustment, and maintenance of CWR track and to perform inspections of CWR track. The track owner must make the training program available for review by FRA upon request.

The one-time requirement for developing CWR training programs has already been fulfilled by railroads. Consequently, there is no additional burden associated with this requirement.

# Annual CWR Re-Training of Employees After First Year

FRA expects all 10,000 employees will receive annual re-training under the above requirement. It is estimated that it will take approximately four (4) hours to complete the comprehensive training course and demonstrate knowledge of the written CWR procedures. Total annual burden for this requirement is 40,000 hours.

Respondent Universe: 37 railroads (7 Class I and 30 Class

II and III)

Burden time per response: 30 minutes Frequency of Response: On occasion

Annual number of responses:

10,000 re-trained employees

Annual Burden: 40,000 hours

**Calculation:** 10,000 re-trained employees x 30 min. = 40,000 hours

- (j) The track owner shall prescribe and comply with recordkeeping requirements necessary to provide an adequate history of track constructed with CWR. At a minimum, these records must include:
  - (1) Rail temperature, location and date of CWR installations. Each record must be retained for at least one year;
  - (2) A record of any CWR installation or maintenance work that does not conform with the written procedures. Such record must include the location of the rail and be maintained until the CWR is brought into conformance with such procedures; and

FRA estimates that approximately 10,000 records will be kept under this requirement. It is estimated that it will take approximately two (2) minutes to complete each record. Total annual burden for this requirement is 333 hours.

Respondent Universe:

279 railroads (7 Class I, 262

Class II & IIIs)

Burden time per response: 2 minutes
Frequency of Response: On occasion
Annual number of Responses: 10,000 records

Annual Burden:

333 hours

**Calculation:** 10,000 records x = 2 min. = 333 hours

(3) Information on inspections of rail joints as specified in paragraph (h)(7) of this section.

FRA estimates that approximately 360,000 records pertaining to rail joint inspections will be kept under the new requirement. It is estimated that it will take approximately two (2) minutes to complete each record. Total annual burden for this requirement is 12,000 hours.

Respondent Universe:

279 railroads (7 Class I, 262

Class II & IIIs)

Burden time per response:

2 minutes On occasion 360,000 records

Frequency of Response: One-time number of Responses:

One-time Burden:

12,000 hours

**Calculation:** 

360,00 0 records x 2 min. = 12,000 hours

Additionally, a periodic inspection and corresponding record is required of these rail joints after the completion of the initial inspection and placement in the rail joint record inventory. Two-thirds of these initial 360,000 records (or 240,000 records) will be kept once a year as a result of periodic joint inspections, and another one-third of these initial 360,000 records will be kept twice a year (240,000 records) as a result of periodic joint inspections. Thus, FRA estimates that approximately 480,000 records will be kept under this new requirement. It is estimated that it will take approximately one (1) minute to complete each record. Total annual burden for this requirement is 8,000 hours.

**Respondent Universe:** 

279 railroads (7 class I, 262

class II & IIIs)

480,000 records

Burden time per response:

1 minute

On occasion

Frequency of Response: One-time number of Responses:

One-time Burden:

8,000 hours

### **Calculation:**

480,00 records x 1 min. =8,000 hours

(k) The track owner must make readily available, at every job site where personnel are assigned to install, inspect or maintain CWR, a copy of the track owner's CWR procedures and all revisions, appendices, updates, and referenced materials related thereto prior to their effective date. Such CWR procedures must be issued and maintained in one CWR procedures manual.

FRA estimates that approximately 279 CWR procedures manuals will be made available under the above requirement. It is estimated 3 that it will take approximately 10 minutes to assemble each CWR procedures manual (with all the necessary documents) and deliver it to each job site. Total annual burden for this requirement is 47 hours.

Respondent Universe: 728 Railroads (all

class I, class II, and class III)

Burden time per response: 10 minutes Frequency of Response: On occasion

Annual number of Responses: 279 CWR procedures manual

Annual Burden:

47 hours

**Calculation:** 279 CWR procedures manuals x 10 min. = 47 hours

Total annual burden for this entire requirement is 60,380 hours (40,000 + 333 + 12,000 + 8,000 + 47).

### § 213.122 Torch cut rail

Within one year of September 21, 1998, all torch cut rail ends in Class 3 track over which regularly scheduled passenger trains operate must be inventoried by the track owner.

The burden for the above is a one-time requirement which has already been fulfilled. Consequently, there is no additional burden associated with this requirement.

### § 213.233 Track inspections

Track inspection records must indicate which track(s) are traversed by the vehicle or inspected on foot as outlined in paragraph (b)(3) of this section. All Class 1, 2 and 3 track inspections must be made in accordance with the following schedule:

Weekly (main track and sidings) - with at least 3 calendar days interval between inspections, or *before use*, if the track is used less than once a week, or *twice weekly* with at least one calendar day interval between inspections, if the track carries passenger trains or more than 10 million gross tons of traffic during the preceding calendar year. Monthly (other than main track and sidings) - with at least 20 calendar days interval between inspections.

Twice weekly (Class 4 and 5 track) - with at least one (1) calendar day interval between inspections.

Railroads currently fill out track inspection reports. This information collection requirement would only involve making a notation on the inspection form as to which track they were on when inspecting two or more tracks at a time. FRA estimates that approximately 300,000 inspections occur each year. It is estimated that there will be, on

average, approximately five (5) notations per inspection (or a total of 12,500 notations per year) and that it will take approximately one (1) minute to make the required notation on the inspection report. Total annual burden for this requirement is 5,000 hours.

Respondent Universe: 744 Railroads (all

Class I, Class II, and Class III)

Burden time per response: 1 minute Frequency of Response: Twice

weekly/weekly/monthly

Annual number of Responses: 300,000 notations

Annual Burden:

5,000 hours

Calculation:

300,00 0 inspect ions x 1 min. = 5,000 hours

## § 213.237 Inspection of rail

- (a) In addition to the inspections required by § 213.233, a track owner shall conduct internal rail inspections sufficient to maintain service failure rates per rail inspection segment in accordance with this paragraph (a) for a 12-month period, as determined by the track owner and calculated within 45 days of the end of the period. These rates shall not include service failures that occur in rail that has been replaced through rail relay since the time of the service failure. Rail used to repair a service failure defect is not considered relayed rail. The service failure rates shall not exceed --
- (1) 0.1 service failure per year per mile of track for all Class 4 and 5 track;

- (2) 0.09 service failure per year per mile of track for all Class 3, 4, and 5 track that carries regularly-scheduled passenger trains or is a hazardous materials route; and
- (3) 0.08 service failure per year per mile of track for all Class 3, 4, and 5 track that carries regularly-scheduled passenger trains and is a hazardous materials route.

Railroads and track owners are already conducting internal rail inspections and keeping necessary documentation of these internal rail inspections as part of their usual and customary procedures. Consequently, there is no additional burden associated with this requirement.

(b) Each rail inspection segment shall be designated by the track owner no later than March 25, 2014, for track that is Class 4 or 5 track, or Class 3 track that carries regularly-scheduled passenger trains or is a hazardous materials route and is used to determine the milepost limits for the individual rail inspection frequency.

Railroads and track owners are already making the necessary designations of each rail inspection segment as part of their usual and customary procedures. Consequently, there is no additional burden associated with this requirement.

- (1) To change the designation of a rail inspection segment or to establish a new segment pursuant to this section, a track owner must submit a detailed request to the FRA Associate Administrator for Railroad Safety/Chief Safety Officer (Associate Administrator). Within 30 days of receipt of the submission, FRA will review the request. FRA will approve, disapprove, or conditionally approve the submitted request, and will provide written notice of its determination.
- (2) The track owner's existing designation shall remain in effect until the track owner's new designation is approved or conditionally approved by FRA.

This requirement will affect Class II railroads primarily. FRA estimates then that approximately 10 detailed requests to change the designation of a rail inspection segment or to establish a new segment pursuant will be made by track owners to FRA under the above requirement. It is estimated that it will take approximately 15 minutes to complete each detailed request and send it to FRA. Total annual burden for this requirement is three (3) hours.

Respondent Universe:

10 Railroads (Class

II)

Burden time per response: Frequency of Response: Annual number of Responses: Annual Burden: 15 minutes
On occasion
10 detailed requests
3 hours

**Calculation:** 10 detailed requests x 15 min. = 3 hours

(4) The track owner shall, upon receipt of FRA's approval or conditional approval, establish the designation's effective date. The track owner shall advise in writing FRA and all affected railroad employees of the effective date.

FRA estimates that approximately 50 notifications to FRA and 120 notifications/bulletins to railroad employees of the designation's effective date will be made by track owners under the above requirement. It is estimated that it will take approximately 15 minutes to complete each notification/designation. Total annual burden for this requirement is 43 hours.

Respondent Universe: 10 Railroads (Class

II)

Burden time per response: 15 minutes Frequency of Response: On occasion Annual number of Responses: 50 notifications +

120 notifications/bulletins

Annual Burden: 43 hours

**Calculation:** 50 notifications x 15 min. + 120 notifications/bulletins x 15

min. = 43 hours

(c) Internal rail inspections on Class 4 and 5 track, or Class 3 track with regularly-scheduled passenger trains or that is a hazardous materials route, shall not exceed a time interval of 370 days between inspections or a tonnage interval of 30 million gross tons (mgt) between inspections, whichever is shorter. Internal rail inspections on Class 3 track that is without regularly-scheduled passenger trains and not a hazardous materials route must be inspected at least once each calendar year, with no more than 18 months between inspections, or at least once every 30 mgt, whichever interval is longer, but in no case may inspections be more than 5 years apart.

As noted above, railroads and track owners are already conducting internal rail inspections and keeping necessary documentation of these internal rail inspections as part of their usual and customary procedures. Consequently, there is no additional burden associated with this requirement.

(1) Any rail used as a replacement plug rail in track that is required to be tested in accordance with this section must have been tested for internal rail flaws.

Again, railroads and track owners are already conducting necessary testing for internal rail flaws of any rail used a replacement plug rail as part of their usual and customary

procedures. Consequently, there is no additional burden associated with this requirement.

(2) The track owner must be able to verify that any plug installed after March 25, 2014, has not accumulated more than a total of 30 mgt in previous and new locations since its last internal rail flaw test, before the next test on the rail required by this section is performed.

Railroads and track owners are already verifying that rail plugs do not exceed 30 mgt in previous and new locations since the last internal flaw test as part of their usual and customary procedures. Consequently, there is no additional burden associated with this requirement.

(3) If plug rail not in compliance with this paragraph (c) is in use after March 25, 2014, trains over that rail must not exceed Class 2 speeds until the rail is tested in accordance with this section.

Railroads and track owners already conduct the necessary testing of plug rail that is in use and not in compliance with this section as part of their usual and customary procedures. Consequently, there is no additional burden associated with this requirement.

- (d) If the service failure rate target identified in paragraph (a) of this section is not achieved, the track owner must inform FRA of this fact within 45 days of the end of the defined 12-month period in which the performance target is exceeded. In addition, the track owner may provide to FRA an explanation as to why the performance target was not achieved and provide a remedial action plan.
- (1) If the performance target rate is not met for two consecutive years, then for the area where the greatest number of service failures is occurring, either:
- (i) The inspection tonnage interval between tests must be reduced to 10 mgt; or
- (ii) The class of track must be reduced to Class 2 until the target service failure rate is achieved.
- (2) In cases where a single service failure would cause the rate to exceed the applicable service failure rate as designated in paragraph (a) of this section, the service failure rate will be considered to comply with paragraph (a) of this section unless a second such failure occurs within a designated 12-month period. For the purposes of paragraph (d)(2) of this section, a period begins no earlier than January 24, 2014.

FRA estimates that it will receive approximately 12 notifications that the service failure rate identified in paragraph (a) of this section has not been achieved under the above requirement. It is estimated that it will take approximately 15 minutes to complete each

notification and send it to FRA. Total annual burden for this requirement is three (3) hours.

Respondent Universe: 10 Railroads (all

Class I, Class II, and Class III)

Burden time per response: 15 minutes Frequency of Response: On occasion Annual number of Responses: 12 notifications

Annual Burden: 3 hours

**Calculation:** 12 notifications x 15 min. = 3 hours

Additionally, FRA estimates that it will receive approximately 12 letters of explanation as to why the performance target was not achieved and 12 remedial action plans under the above requirement. It is estimated that it will take approximately 15 minutes to complete each explanation and approximately 15 minutes to complete each remedial action plan and send them to FRA. Total annual burden for this requirement is six (6) hours.

Respondent Universe: 10 Railroads (all class

I, class II, and class III)

Burden time per response: 15 minutes Frequency of Response: On occasion

Annual number of Responses: 12 explanations + 12 remedial action

plans

Annual Burden: 6 hours

**Calculation:** 12 explanations x 15 min. + 12 remedial action plans x 15

min. = 6 hours

(e) Each defective rail shall be marked with a highly visible marking on both sides of the web and base except that, where a side or sides of the web and base are inaccessible because of permanent features, the highly visible marking may be placed on or next to the head of the rail.

Railroads and track owners already mark defective rail with a highly visible marking on both sides of the web and base or, when inaccessible, on or next to the head of the rail as part of their usual and customary procedures. Consequently, there is no additional burden associated with this requirement.

- (f) Inspection equipment shall be capable of detecting defects between joint bars, in the area enclosed by joint bars.
- (g) If the person assigned to operate the rail defect equipment (i.e., the qualified operator) determines that a valid search for internal defects could not be made over a particular

length of track, that particular length of track may not be considered as internally inspected under paragraphs (a) and (c) of this section.

Railroads and track owners already keep necessary documentation when a qualified rail defect detection equipment operator determines that a valid search for internal rail defects could not be made over a particular length of track as part of their usual and customary procedures. Consequently, there is no additional burden associated with this requirement.

Total annual burden for this entire requirement is 55 hours (3 + 43 + 3 + 6). **§ 213.238 Qualified Operator** 

(a) Each provider of rail flaw detection shall have a documented training program in place and shall identify the types of rail flaw detection equipment for which each equipment operator it employs has received training and is qualified. A provider of rail flaw detection may be the track owner. A track owner shall not utilize a provider of rail flaw detection that fails to comply with the requirements of this paragraph

Railroads and providers of rail flaw detection have documented training program in place as part of their usual and customary procedures. Consequently, there is no additional burden associated with this requirement.

- (b) A qualified operator shall be trained and shall have written authorization by the employing track owner or railroad (employer) to:
- (1) Conduct a valid search for internal rail defects utilizing the specific type(s) of equipment for which he or she is authorized and qualified to operate;
- (2) Determine that such equipment is performing as intended;
- (3) Interpret equipment responses and institute appropriate action in accordance with the employer's procedures and instructions; and
- (4) Determine that each valid search for an internal rail defect is continuous throughout the area inspected and has not been compromised due to environmental contamination, rail conditions, or equipment malfunction.

Qualified operators of rail flaw detection equipment already receive training by railroads and providers of flaw detection as part of these entities usual and customary procedures. Consequently, there is no additional burden associated with this requirement.

(c) To be qualified, the operator must have received training in accordance with the documented training program and a minimum of 160 hours of rail flaw detection

experience under direct supervision of a qualified operator or rail flaw detection equipment manufacturer's representative, or some combination of both. The operator must demonstrate proficiency in the rail defect detection process, including the equipment to be utilized, prior to initial qualification and authorization by the employer for each type of equipment.

As noted above, qualified operators of rail flaw detection equipment already receive training as well as a minimum of 160 hours of supervised rail flaw detection experience from railroads and providers of flaw detection and must demonstrate proficiency in the rail detection process prior to initial qualification and authorization by the employer for each type of equipment as part of these entities usual and customary procedures. Consequently, there is no additional burden associated with this requirement.

(d) Each employer shall reevaluate the qualifications of, and administer any necessary recurrent training for, the operator as determined by and in accordance with the employer's documented program. The reevaluation process shall require that the employee successfully complete a recorded examination and demonstrate proficiency to the employer on the specific equipment type(s) to be operated. Proficiency may be determined by a periodic review of test data submitted by the operator.

Railroads/flaw detection providers reevaluate the qualifications of their operators and administer any necessary recurrent training as well as conduct recorded examinations and proficiency tests as part of their usual and customary procedures. Consequently, there is no additional burden associated with this requirement.

(e) Each employer of a qualified operator shall maintain written or electronic records of each qualification in effect. Each record shall include the name of the employee, the equipment to which the qualification applies, date of qualification, and date of the most recent reevaluation, if any.

Railroads/flaw detection providers already maintain the required written/electronic records of each qualification in effect with the stipulated information as part of their usual and customary procedures. Consequently, there is no additional burden associated with this requirement.

(f) Any employee who has demonstrated proficiency in the operation of rail flaw detection equipment prior to January 24, 2014, is deemed a qualified operator, regardless of the previous training program under which the employee was qualified. Such an operator shall be subject to paragraph (d) of this section.

Railroads/flaw detection providers reevaluate the qualifications of their operators and administer any necessary recurrent training as well as conduct recorded examinations and proficiency tests as part of their usual and customary procedures. Consequently, there is no additional burden associated with this requirement.

(g) Records concerning the qualification of operators, including copies of equipment-specific training programs and materials, recorded examinations, demonstrated proficiency records, and authorization records, shall be kept at a location designated by the employer and available for inspection and copying by FRA during regular business hours.

Railroads/flaw detection providers already maintain the required written/electronic records of each qualified operator who has demonstrated proficiency and been duly authorized by them to operate flaw detection equipment as part of their usual and customary procedures. Consequently, there is no additional burden associated with this requirement.

## § 213.241 Inspection records

- (a) Each owner of track to which this part applies shall keep a record of each inspection required to be performed on that track under this subpart.
- (b) Each record of an inspection under §§ 213.4, 213.119, 213.233, and 213.235 must be prepared on the day the inspection is made and signed by the person making the inspection. Records must specify the track inspected, date of inspection, location and nature of any deviation from the requirements of this part, and the remedial action taken by the person making the inspection. The owner must designate the location(s) where each original record shall be maintained for at least one year after the inspection covered by the record. The owner must also designate one location, within 100 miles of each state in which they conduct operations, where copies of records which apply to those operations are either maintained or can be viewed following 10 days notice by the Federal Railroad Administration.
- (c) Records of internal rail inspections required by § 213.237 shall specify the—
- (1) Date of inspection;
- (2) Track inspected, including beginning and end points;
- (3) Location and type of defects found under § 213.113;
- (4) Size of defects found under § 213.113, if not removed prior to the next train movement;
- (5) Initial remedial action taken and the date thereof; and
- (6) Location of any track not tested pursuant to § 213.237(g).

- (d) The track owner shall retain a rail inspection record under paragraph (c) of this section for at least two years after the inspection and for one year after initial remedial action is taken.
- (e) The track owner shall maintain records sufficient to demonstrate the means by which it computes the service failure rate on all track segments subject to the requirements of § 213.237(a) for the purpose of determining compliance with the applicable service failure rate target.
- (f) Each track owner required to keep inspection records under this section shall make those records available for inspection and copying by FRA upon request.
- (g) For purposes of complying with the requirements of this section, a track owner may maintain and transfer records through electronic transmission, storage, and retrieval provided that —
- (1) The electronic system is designed so that the integrity of each record is maintained through appropriate levels of security such as recognition of an electronic signature, or another means, which uniquely identifies the initiating person as the author of that record. No two persons shall have the same electronic identity;
- (2) The electronic storage of each record must be initiated by the person making the inspection within 24 hours following the completion of that inspection;
- (3) The electronic system must ensure that each record cannot be modified in any way, or replaced, once the record is transmitted and stored;
- (4) Any amendment to a record must be electronically stored apart from the record which it amends. Each amendment to a record shall be uniquely identified as to the person making the amendment;
- (5) The electronic system must provide for the maintenance of inspection records as originally submitted without corruption or loss of data;
- (6) Paper copies of electronic records and amendments to those records that may be necessary to document compliance with this part shall be made available for inspection and copying by FRA at the locations specified in paragraph (b) of this section; and
- (7) Track inspection records must be kept available to persons who performed the inspections and to persons performing subsequent inspections.

There are approximately 728 railroads subject to the inspection and reporting requirements of the Track Safety Standards. The dimension or size of the respondents spans the gamut from five-to-ten mile short lines to large common carriers.

The frequency of inspection is variable depending on the type and usage of track from one inspection and report per month for auxiliary tracks to as much as twice per week for high speed, heavy tonnage main lines or where passenger trains operate. Inspections required for the detection of internal rail flaws is limited to one inspection per year for the higher speed main tracks. No internal rail inspection is required for yard tracks or slow speed main tracks.

The burden associated with track and rail inspections is based on a presumption of track mileage by type and track class with an assumed inspection rate of 10 miles per hour and an additional five minutes per inspection hour to prepare the report. High speed, heavy tonnage track amounts to approximately 95,000 track miles requiring two inspections per week or 9,880,000 inspection-miles per year. Weekly inspections are required on 100,000 miles for a total of 5,200,000 inspection-miles per year and 25,000 miles require monthly inspection or 300,000 inspection miles per year. Based on the 10 mile per hour inspection rate and the additional time for report preparation, the inspection and reporting burden was calculated at 1,666,166 man-hours. Inspections for internal rail flaws convert to 6,608 equivalent man-hours, while identifying the location of any intervals of track not tested per § 213.237(d) will take approximately 167 hours (2,000 records @ 5 min. each) for a grand total of 1,672,941 burden hours. This includes all of the required inspections and reports required by Section 213.241 of the Track Standards.

> Respondent Universe: 728 Railroads (all

class I, class II, and class III) Burden time per response: See above

Frequency of Response: **Twice** weekly/weekly/monthly

1,542,089 records (See above) Annual number of Responses:

Annual Burden:

1,672,9 41 hours

**Calculation:** 

above for burden hour calcula tion.

See

Note: The revised rule requires that the railroad's rail inspection records include the date of inspection, track identification and milepost for each location tested, type of defect found and size if not removed prior to traffic, and initial remedial action as required by § 213.113. FRA also proposes that all tracks that do not receive a valid test are documented in the railroad rail inspection records.

There is no additional burden associated with this requirement because it is already being performed under the current rule.

Total annual burden for this entire requirement is 1,672,941 burden hours.

# **HIGH SPEED TRACK**

# 213.303 - Responsibility for Compliance

If an owner of track to which this subpart applies assigns responsibility for the track to another person (by lease or otherwise), notification of the assignment must be provided to the appropriate FRA Regional Office at least 30 days in advance of the assignment. The notification may be made by any party to that assignment, but shall be in writing and include the following:

- (i) The name and address of the track owner;
- (ii) The name and address of the person to whom responsibility is assigned (assignee);
- (iii) A statement of the exact relationship between the track owner and the assignee;
- (iv) A precise identification of the track;
- (v) A statement as to the competence and ability of the assignee to carry out the duties of the track owner under this subpart;
- (vi) A statement signed by the assignee acknowledging the assignment to that person of responsibility for purposes of compliance with this subpart.

FRA estimates that it will receive approximately one (1) notification annually under the above requirement. It is estimated that it will take approximately eight (8) hours to complete the notification and forward it to FRA. Total annual burden for this requirement is eight (8) hours.

Respondent Universe: 2 railroads (Amtrak &

Metro North)

Burden time per response: 8 hours Frequency of Response: On occasion Annual number of Responses: 1 r
Annual Burden:

1 notification

8 hours

**Calculation:** 

notific ation x 8 hrs. = 8 hours

## 213.305 Designation of qualified individuals; general qualifications.

- A. Each track owner to which this subpart applies shall designate qualified individuals who shall be responsible for the maintenance and inspection of track in compliance with the safety requirements prescribed in this subpart. Each designated individual, including a contractor or an employee of a contractor who is not a railroad employee, designated to:
  - (a) Supervise restorations and renewals of track shall meet the following minimum requirements: (1) At least: (i) Five years of responsible supervisory experience in railroad track maintenance in track Class 4 or higher and the successful completion of a course offered by the employer or by a college level engineering program, supplemented by special on the job training emphasizing the techniques to be employed in the supervision, restoration, and renewal of high speed track; or (ii) A combination of at least one year of responsible supervisory experience in track maintenance in Class 4 or higher and the successful completion of a minimum of 80 hours of specialized training in the maintenance of high speed track provided by the employer or by a college level engineering program, supplemented by special on the job training provided by the employer with emphasis on the maintenance of high speed track; or (iii) A combination of at least two years of experience in track maintenance in track Class 4 or higher and the successful completion of a minimum of 120 hours of specialized training in the maintenance of high speed track provided by the employer or by a college level engineering program supplemented by special on the job training provided by the employer with emphasis on the maintenance of high speed track.

- (2) Demonstrate to the track owner that the individual: (i) Knows and understands the requirements of this Subpart that apply to the restoration and renewal of track for which he or she is responsible; (ii) Can detect deviations from those requirements; and (iii) Can prescribe appropriate remedial action to correct or safely compensate for those deviations; and
- (3) Be authorized in writing by the track owner to prescribe remedial actions to correct or safely compensate for deviations from the requirements of this subpart and successful completion of a recorded examination on this subpart as part of the qualification process.
- В. (b.) <u>Inspect track for defects</u>. Inspect track for defects shall meet the following minimum qualifications: (1) At least: (i) Five years of responsible experience inspecting track in Class 4 or above and the successful completion of a course offered by the employer or by a college level engineering program, supplemented by special on the job training emphasizing the techniques to be employed in the inspection of high speed track; or (ii) A combination of at least one year of responsible experience in track inspection in Class 4 or above and the successful completion of a minimum of 80 hours of specialized training in the inspection of high speed track provided by the employer or by a college level engineering program, supplemented by special on the job training provided by the employer with emphasis on the inspection of high speed track; or (iii) A combination of at least two years of experience in track maintenance in Class 4 or above and the successful completion of a minimum of 120 hours of specialized training in the inspection of high speed track provided by the employer or from a college level engineering program, supplemented by special on the job training provided by the employer with emphasis on the inspection of high speed track. (Note: Employees performing this job have already qualified or have received training as part of their routine duties. Thus, there is no extra or other burden associated with this requirement.)
  - (2) Demonstrate to the track owner that the individual: (i) Knows and understands the requirements of this Subpart that apply to the inspection of the track for which he or she is responsible; (ii) Can detect deviations from those requirements; and (iii) Can prescribe appropriate remedial action to correct or safely compensate for those deviations; and (3) Be authorized in writing by the track owner to prescribe remedial actions to correct or safely compensate for deviations from the requirements in this subpart and successful completion of a recorded examination on this subpart as part of the qualification process.
- C. Individuals designated under paragraph (a) or (b) that inspect continuous welded rail track (CWR) or supervise the installation, adjustment, and maintenance of CWR in accordance with the written procedures established by the track owner

must have written authorization from the track owner to prescribe remedial actions to correct or safely compensate for deviations from the requirements in those procedures and successful completion of a recorded examination on those procedures as part of the qualification process. The recorded examination might be written, or it might be, for example, a computer file with the results of an interactive training course.

### **Designations** (fully qualified)

This one-time requirement has already been fulfilled. Consequently, there is no additional burden associated with this requirement.

### Designations (partially qualified)

FRA estimates that approximately 200 individuals will be designated partially qualified under the above requirements. It is estimated that it will take approximately 10 minutes for track owners to so designate each employee or contract worker. Total annual burden for this requirement is 33 hours.

Respondent Universe: 20 railroads
Burden time per response: 10 minutes
Frequency of Response: On occasion
Annual number of Responses: 200 designations

Annual Burden: 33 hours

Calcul ation:

200

design ations x 10 min. = 33 hours

Total annual burden for this entire requirement is 33 hours.

#### 213.317 - Waivers

Any owner of track to which this subpart applies may petition the Federal Railroad Administrator for a waiver from any or all requirements prescribed in this subpart. Each petition for exemption under this section must be filed in the manner and contain the information required by §§ 211.7 and 211.9 of this chapter.

FRA estimates that it will receive approximately one (1) petition under the above requirement. It is estimated that it will take approximately 80 hours to complete each petition in the prescribed manner and forward it to FRA. Total annual burden for this requirement is 80 hours.

Respondent Universe: 2 railroads (Amtrak &

Metro North)
Burden time per response: 80 hours
Frequency of Response: On occasion

Annual number of Responses: 1 petition

Annual Burden:

80 hours

<u>Calculation:</u>

1
petitio
n x 80
hrs. =
80
hours

## 213.329 Curves, elevation and speed limitations.

A. (d) Each vehicle type must be approved by FRA to operate on track with a qualified cant deficiency, E<sub>u</sub>, greater than 3 inches. Each vehicle type must demonstrate, in a ready-for-service load condition, compliance with the requirements of either paragraph (d)(1) or (d) (2) of this section. (1) When positioned on a track with a uniform superelevation equal to the proposed cant deficiency: (i) No wheel of the vehicle unloads to a value less than 60 percent of its static value on perfectly level track; and (ii) For passenger cars, the roll

angle between the floor of the equipment and the horizontal does not exceed 8.6 degrees; or (2) When operating through a constant radius curve at a constant speed corresponding to the proposed cant deficiency, and a test plan is submitted and approved by FRA in accordance with §§ 213.345(e) and (f): (i) The steady-state (average) load on any wheel, throughout the body of the curve, is not less than 60 percent of its static value on perfectly level track; and (ii) For passenger cars, the steady-state (average) lateral acceleration measured on the floor of the car body does not exceed 0.15g.

The burden for test plans is included under that of § 213.345(e) below. Consequently, there is no additional burden associated with this requirement.

В. (e.) The track owner or railroad shall transmit the results of the testing specified in paragraph (d) of this section to FRA's Associate Administrator for Railroad Safety/Chief Safety Officer (FRA) requesting approval for the vehicle type to operate at the desired curving speeds allowed under the formula in paragraph (b) of this section. The request shall be in writing and shall contain, at a minimum, the following information -- (1) A description of the vehicle type involved, including schematic diagrams of the suspension system(s) and the estimated location of the center of gravity above top of rail; (2) The test procedure, including the load condition under which the testing was performed, and description of the instrumentation used to qualify the vehicle, as well as the maximum values for wheel unloading and roll angles or accelerations that were observed during testing; and (3) For vehicle types not subject to Parts 238 or 229 of this Chapter, procedures or standards in effect that relate to the maintenance of all safety-critical components of the suspension system(s) for the particular vehicle type. Safety-critical components of the suspension system are those that impact or have significant influence on the roll of the car body and the distribution of weights on the wheels.

FRA estimates that approximately 200 documents for vehicle type approval with all the necessary information (including test plans and the results of testing) will be submitted to FRA under the above requirement. It is estimated that it will take the track owner or railroad approximately four (4) hours to complete the necessary document and send it to FRA. Total annual burden for this requirement is 800 hours.

Respondent Universe: 20 railroads
Burden time per response: 4 hours
Frequency of Response: On occasion
Annual number of Responses: 200 documents

Annual Burden:

800 hours

### **Calculation:** 200 documents x 4 hrs. = 800 hours

C. (f.) In approving the request in paragraph (e) of this section, FRA may impose conditions necessary for safely operating at the higher curving speeds. Upon FRA approval of the request, the track owner or railroad shall notify FRA in writing no less than 30 calendar days prior to the proposed implementation of the approved higher curving speeds allowed under the formula in paragraph (b) of this section. The notification shall contain, at a minimum, identification of the track segment(s) on which the higher curving speeds are to be implemented. [Note: Although the language is different here, the requirement is essentially the same as the pervious § 213.329(e).]

FRA estimates that there will be approximately 20 notifications will be sent to FRA under the above requirement. It is estimated that it will take the track owner/railroad approximately 40 hours to complete each notification and it to FRA. Total annual burden for this requirement is 800 hours.

Respondent Universe: 20 railroads
Burden time per response: 40 hours
Frequency of Response: On occasion
Annual number of Responses: 20 notifications

Annual Burden:

15 hours

**Calculation:** 20 notifications x 40 hrs. = 800 hours

- D. (g) The documents required by this section must be provided to FRA by:
  - (1) The track owner; or
  - (2) A railroad that provides service with the same vehicle type over trackage of one or more track owner(s), with the written consent of each affected track owner.

FRA estimates that approximately 20 written consents of other track owners will be obtained by track owners/railroads under the above requirement. It is estimated that it will take approximately 45 minutes to obtain the written each consent. Total annual burden for this requirement is 15 hours.

Respondent Universe: 20 railroads
Burden time per response: 45 minutes
Frequency of Response: On occasion
Annual number of Responses: 20 written consents
Annual Burden:

15 hours

**Calculation:** 20 written consents x 45 min. = 15 hours

E. (h) (1) Vehicle types permitted by FRA to operate at cant deficiencies, E<sub>u</sub>, greater than 3 inches but not more than 5 inches shall be considered qualified under this section to operate at those permitted cant deficiencies for any Class 6 track segment. The track owner or railroad shall notify FRA in writing no less than 30 calendar days prior to the proposed implementation of such curving speeds in accordance with paragraph (f) of this section.

The burden for this requirement is already included under that of section 213.329(f) above. Consequently, there is no additional burden associated with this requirement.

Total annual burden for this entire requirement is 1,615 hours 800 + 800 + 15).

#### **213.333 Automated Vehicle Inspection Systems**

#### **Track Geometry Measurement System**

(a) A qualifying Track Geometry Measurement System (TGMS) vehicle shall be operated at the following frequency: (1) For operations at a qualified cant deficiency,  $E_u$ , of more than 5 inches on track Classes 1 through 5, at least twice per calendar year with not less than 120 days between inspections. (2) For track Class 6, at least once per calendar year with not less than 170 days between inspections. For operations at a qualified cant deficiency,  $E_u$ , of more than 5 inches on track Class 6, at least twice per calendar year with not less than 120 days between inspections. (3) For track Class 7, at least twice within any 120-day period with not less than 25 days between inspections. (4) For track Classes 8 and 9, at least twice within any 60-day period with not less than 12 days between inspections.

(b) A qualifying TGMS shall meet or exceed minimum design requirements specifying that -- (1) Track geometry measurements shall be taken no more than 3 feet away from the contact point of wheels carrying a vertical load of no less than 10 kips per wheel, *unless approved by FRA*; (2) Track geometry measurements shall be taken and recorded on a distance-based sampling interval not exceeding 1 foot not exceeding 2 feet; and (3) Calibration procedures and parameters are assigned to the system which assure that measured and recorded values accurately represent track conditions. Track geometry measurements recorded by the system shall not differ on repeated runs at the same site at the same speed more than 1/8 inch.

FRA estimates that it will receive approximately one (1) request each year from railroads concerning track geometry measurements taken from a distance different from that specified under (b)(1) above. It is estimated that each notification will take approximately eight (8) hours to complete each request. Total annual burden for this requirement is eight (8) hours.

Respondent Universe: 50 railroads

Burden time per response: 8 hours
Frequency of Response: On occasion

Annual number of Responses: 1 request

Annual Burden:

8 hours

**Calculation:** 1 requests x 8 hrs. = 8 hours

- (c) A qualifying TGMS shall be capable of measuring and processing the necessary track geometry parameters to determine compliance with -- (1) For operations at a qualified cant deficiency, E<sub>u</sub>, of more than 5 inches on track Classes 1 through 5: § 213.53, Track gage; § 213.55(b), Track alinement; § 213.57, Curves; elevation and speed limitations; § 213.63, Track surface; and § 213.65, Combined alinement and surface deviations. (2) For track Classes 6 through 9: § 213.323, Track gage; § 213.327, Track alinement; § 213.329, Curves; elevation and speed limitations; § 213.331, Track surface; and for operations at a cant deficiency of more than 5 inches § 213.332, Combined alinement and surface deviations.
- (d) A qualifying TGMS shall be capable of producing, within 24 hours of the inspection, output reports that --
- (1) Provide a continuous plot, on a constant-distance axis, of all measured track geometry parameters required in paragraph (c) of this section;

- (2) Provide an exception report containing a systematic listing of all track geometry conditions which constitute an exception to the class of track over the segment surveyed.
- (e) The output reports required under paragraph (c) of this section shall contain sufficient location identification information which enable field forces to easily locate indicated exceptions.
- (f) Following a track inspection performed by a qualifying TGMS, the track owner shall, within two days after the inspection, field verify and institute remedial action for all exceptions to the class of track.

FRA estimates that it will receive approximately 50 output reports under the above requirements. It is estimated that it will take approximately 10 hours to complete each required report. Total annual burden for this requirement is 500 hours.

Respondent Universe: 1 railroad (Amtrak)

Burden time per response: 10 hours Frequency of Response: On occasion Annual number of Responses: 50 output reports

Annual Burden:

500 hours

**Calculation:** 50 output reports x 10 hrs. = 500 hours

(g) The track owner or railroad shall maintain, for a period of one year following an inspection performed by a qualifying TGMS, a copy of the plot and the exception report for the track segment involved, and additional records which: (1) Specify the date the inspection was made and the track segment involved; and (2) Specify the location, remedial action taken, and the date thereof, for all listed exceptions to the class.

FRA estimates that approximately 50 exception reports/records will be kept by railroads (track owners) under the above requirement. It is estimated that it will take approximately 10 hours to produce each printout/record. Total annual burden for this requirement is 500 hours.

Respondent Universe: 1 railroad (Amtrak)

Burden time per response: 10 hours

Frequency of Response: Annual number of Responses: Annual Burden: On occasion 50 exception reports/records

500 hours

**Calculation:** 

excepti on reports /record s x 10 hrs. = 500 hours

- (h) For track Classes 8 and 9, a qualifying Gage Restraint Measuring System (GRMS) shall be operated at least once per calendar year with at least 170 days between inspections. The lateral capacity of the track structure shall not permit a Gage Widening Projection (GWP) greater than 0.5 inch.
- (j) As further specified for the combination of track class, cant deficiencies, and vehicles subject to paragraphs (j)(1) through (j)(3) of this section, a vehicle having dynamic response characteristics that are representative of other vehicles assigned to the service shall be operated over the route at the revenue speed profile. The vehicle shall either be instrumented or equipped with a portable device that monitors onboard instrumentation on trains. Track personnel shall be notified when onboard accelerometers indicate a possible track-related problem. Testing shall be conducted at the frequencies specified in paragraphs (j)(1) through (j)(3) of this section, unless otherwise determined by FRA after reviewing the test data required by this Subpart.
- (1) For operations at a qualified cant deficiency,  $E_{\rm u}$ , of more than 5 inches on track Classes 1 through 6, carbody acceleration shall be monitored at least once each calendar quarter with not less than 25 days between inspections on at least one passenger car of each type that is assigned to the service; and
- (2) For operations at track Class 7 speeds, carbody and truck accelerations shall be monitored at least twice within any 60-day period with not less than 12 days between inspections on at least one passenger car of each type that is assigned to the service; and

(3) For operations at track Classes 8 and 9 speeds, carbody acceleration shall be monitored at least four times within any 7-day period with not more than 3 days between inspections on at least one non-passenger and one passenger carrying vehicle of each type that is assigned to the service, as appropriate. Truck acceleration shall be monitored at least twice within any 60-day period with not less than 12 days between inspections on at least one passenger carrying vehicle of each type that is assigned to the service, as appropriate.

FRA estimates that approximately two (2) notifications to track personnel will be made when onboard accelerometers indicate a possible track-related problem. Because of the testing involved, it is estimated that each notification will take approximately 10 hours to complete. Total annual burden for this requirement is 20 hours.

Respondent Universe: 1 railroad (Amtrak)

Burden time per response: 10 hours Frequency of Response: On occasion Annual number of Responses: 2 notifications

Annual Burden:

20 hours

<u>Calculation</u>: 2 notific ations

x 10 hrs. = 20

hours

(k)(1) The instrumented vehicle or the portable device, as required in paragraph (j) of this section, shall monitor vertical and lateral accelerations of the carbody. The accelerometers shall be attached to the car body on or under the floor of the vehicle, as near the center of a truck as practicable. (2) In addition, a device for measuring lateral accelerations shall be mounted on a truck frame at a longitudinal location as close as practicable to an axle's centerline (either outside axle for trucks containing more than 2 axles), or, if approved by FRA, at an alternate location. After monitoring this data for 2 years, or 1 million miles, whichever occurs first, the track owner or railroad may petition

FRA for exemption from this requirement. (3) If any of the car body lateral, car body vertical, or truck frame lateral acceleration safety limits is exceeded, corrective action shall be taken as necessary. Track personnel shall be notified when the accelerometers indicate a possible track-related problem.

FRA estimates that approximately one (1) request for an alternate location of devices for measuring lateral accelerations mounted on a truck frame will be made to FRA and approved under the above requirement. It is estimated that each request will take approximately one (1) hour to complete and send to FRA. Total annual burden for this requirement is one (1) hour.

Respondent Universe: 1 railroad (Amtrak)

Burden time per response: 1 hour Frequency of Response: On occasion

Annual number of Responses: 1 request for an alternative location

Annual Burden:

1 hour

**Calculation:** 

request for alt. locatio ns x 1 hr. = 1 hour

(l) For track Classes 8 and 9, the track owner or railroad shall submit a report to FRA, once each calendar year, which provides an analysis of the monitoring data collected in accordance with paragraphs (j) and (k) of this section. Based on a review of the report, FRA may require that an instrumented vehicle having dynamic response characteristics that are representative of other vehicles assigned to the service be operated over the track at the revenue speed profile. The instrumented vehicle shall be equipped to measure wheel/rail forces. If any of the wheel/rail force limits in this section's table of vehicle/track interaction safety limits is exceeded, appropriate speed restrictions shall be applied until corrective action is taken.

FRA estimates that there will be approximately one (1) report per year will be submitted for FRA under the above requirement. It is estimated that it will take approximately eight (8) hours to complete each report, which provides an analysis of the monitoring data

collected in accordance with paragraphs (j) and (k) of this section, and then send it to FRA. Total annual burden for this requirement is eight (8) hours.

Respondent Universe: 1 railroad (Amtrak)

Burden time per response: 8 hours Frequency of Response: Annually

Annual number of Responses: 1 monitoring data reports

Annual Burden:

8 hours

**Calculation:** 4 monitoring data reports x 8 hrs. = 8 hours

(m) The track owner or railroad shall maintain a copy of the most recent exception printouts for the inspections required under paragraphs (j), (k), and (l) of this section, as appropriate.

The burden for this requirement is included above as part of the data monitoring reports. Consequently, there is no additional or other burden associated with this requirement.

Total annual burden for this entire requirement is 1,037 hours (8 + 500 + 500 + 20 + 1 + 8).

#### 213.339 Inspection of rail in service.

A continuous search for internal defects must be made of all rail in track at least twice annually with not less than 120 days between inspections. Each defective rail must be marked with a highly visible marking on both sides of the web and base.

Currently, this is a usual and customary procedure practiced by all railroads and will not, therefore, impose any additional paperwork burden on them.

# 213.341 Initial inspection of new rail and welds.

The track owner shall provide for the initial inspection of newly manufactured rail, and for initial inspection of new welds made in either new or used rail. A track owner may demonstrate compliance with this section by providing for:

A. Mill inspection. A continuous inspection at the rail manufacturer's mill shall constitute compliance with the requirement for initial inspection of new rail,

provided that the inspection equipment meets the applicable requirements specified in § 213.339. The track owner shall obtain a copy of the manufacturer's report of inspection and retain it as a record until the rail receives its first scheduled inspection under § 213.339.

FRA estimates that approximately 20 reports will be retained by track owners under the above requirement. It is estimated that it will take approximately 16 hours to produce each report. Total annual burden for this requirement is 320 hours.

Respondent Universe: 20 railroads

Burden time per response: 16 hours Frequency of Response: On occasion

Annual number of Responses: 20 reports

Annual Burden:

320 hours

Calculation: 20

reports x 16 hrs. = 320 hours

B. Welding plant inspection. A continuous inspection at a welding plant, if conducted in accordance with the provisions of paragraph (b) of this section, and accompanied by a plant operator's report of inspection which is retained as a record by the track owner, shall constitute compliance with the requirements for initial inspection of new rail and plant welds, or of new plant welds made in used rail.

This inspection and report is done automatically by the plant operator and routinely provided to the railroad. Consequently, there is no burden associated with this requirement.

C. Inspection of field welds. Initial inspection of field welds, either those joining the ends of CWR strings or those made for isolated repairs, shall be conducted not

less than one day and not more than 30 days after the welds have been made. The initial inspection may be conducted by means of portable test equipment. The track owner shall retain a record of such inspections until the welds receive their first scheduled inspection under § 213.339.

FRA estimates that approximately 1,000 records will be retained by track owners under the above requirement. It is estimated that it will take approximately 20 minutes to make each record. Total annual burden for this requirement is 333 hours.

Respondent Universe: 20 railroads

Burden time per response: 20 minutes
Frequency of Response: On occasion
Annual number of Responses: 1,000 records

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Annual Burden:

333 hours

Calculation: 1,000

records x 20 min. = 333 hours

D. Each defective rail found during inspections conducted under paragraph (a) or (d) of this section shall be marked with highly visible markings on both sides of the web and base and the remedial action as appropriate under §213.337 will apply.

Currently, this is a usual and customary procedure practiced by all railroads and will not, therefore, impose any additional paperwork burden on them.

Total annual burden for this entire requirement is 653 hours (320 + 0 + 333).

## 213.343 Continuous welded rail (CWR).

A. Each track owner with track constructed of CWR shall have in effect written procedures which address the installation, adjustment, maintenance and inspection of CWR, and a training program for the application of those procedures, which shall be submitted to the Federal Railroad Administration (FRA) within six

months following the effective date of this rule.

This is a one-time requirement which has already been fulfilled. Consequently, there is no additional burden associated with this requirement.

B. The track owner shall have in effect a comprehensive training program for the application of these written CWR procedures, with provisions for periodic retraining, for those individuals designated under §213.305(c) of this part as qualified to supervise the installation, adjustment, and maintenance of CWR track and to perform inspections of CWR track.

This is a one-time requirement which has already been fulfilled. Consequently, there is no additional burden associated with this requirement.

- C. The track owner shall prescribe recordkeeping requirements necessary to provide an adequate history of track constructed with CWR. At a minimum, these records must include:
  - (1) Rail temperature, location and date of CWR installations. This record shall be retained for at least one year; and
  - (2) A record of any CWR installation or maintenance work that does not conform with the written procedures. Such record must include the location of the rail and be maintained until the CWR is brought into conformance with such procedures.

FRA estimates that approximately 3,000 records will be kept by track owners under the above requirement. It is estimated that it will take approximately four (4) hours to complete CWR installation or maintenance work and make the corresponding record. Total annual burden for this requirement is 12,000 hours.

Respondent Universe: 20 railroads

Burden time per response: 4 hours
Frequency of Response: On occasion

Annual number of Responses: 3,000 records

Annual Burden:

12,000 hours <u>Calculation</u>:

3,000 records x 4 hrs. = 12,000 hours

D. Track owners shall revise their CWR plans to include provisions for the inspection of joint bars in accordance with §§ 213.119(g) and 213.119 (i)(3).

The burden for this requirement is already covered under those of § 213.119(g) and § 213.119(i)(3), respectively. Consequently, there is no additional burden associated with this requirement.

Total annual burden for this entire requirement is 12,000 hours.

# 213.345 A Vehicle qualification testing.

(a) <u>General</u>. All vehicle types intended to operate at track Class 6 speeds or above, or at any curving speed producing more than 5 inches of cant deficiency, shall be qualified for operation for their intended track classes in accordance with this Subpart. A qualification program shall be used to ensure that the vehicle/track system will not exceed the wheel/rail force safety limits and the carbody and truck acceleration criteria specified in § 213.333 -- (1) At any speed up to and including 5 mph above the proposed maximum operating speed; and (2) On track meeting the requirements for the class of track associated with the proposed maximum operating speed. For purposes of qualification testing, speeds may exceed the maximum allowable speed for the class of track in accordance with the test plan approved by FRA. [*Note: The burden for test plans/programs is included under section 213.329 above.*]

FRA estimates that approximately 50 qualification programs will be developed under the above requirement. It is estimated that it will take approximately 120 hours to develop each qualification program and submit it to FRA. Total annual burden for this requirement is 6,000 hours.

Respondent Universe: 50 railroads

Burden time per response: 120 hours
Frequency of Response: On occasion
Annual number of Responses: 50 qualification programs

Annual Burden:

6,000

# **<u>Calculation</u>**: 50 qualification programs x 120 hrs. = 6,000 hours

- (b) Existing vehicle type qualification. Vehicle types previously qualified or permitted to operate at track Class 6 speeds or above or at any curving speeds producing more than 5 inches of cant deficiency prior to March 13, 2013, shall be considered as being successfully qualified under the requirements of this section for operation at the previously operated speeds and cant deficiencies over the previously operated track segment(s).
- (c) <u>New vehicle type qualification</u>. Vehicle types not previously qualified under this Subpart shall be qualified in accordance with the requirement of this paragraph (c).
- (1) <u>Simulations or measurement of wheel/rail forces</u>. For vehicle types intended to operate at track Class 6 speeds, simulations or measurement of wheel/rail forces during qualification testing shall demonstrate that the vehicle type will not exceed the wheel/rail force safety limits specified in § 213.333. Simulations, if conducted, shall be in accordance with paragraph (c)(2) of this section. Measurement of wheel/rail forces, if conducted, shall be performed over a representative segment of the full route on which the vehicle type is intended to operate.
- (2) <u>Simulations</u>. For vehicle types intended to operate at track Class 7 speeds or above, or at any curving speed producing more than 6 inches of cant deficiency, analysis of vehicle/track performance (computer simulations) shall be conducted using an industry recognized methodology on: (i) An analytically defined track segment representative of minimally compliant track conditions (MCAT—Minimally Compliant Analytical Track) for the respective track class(es) as specified in Appendix D to this Part; and (ii) A track segment representative of the full route on which the vehicle type is intended to operate. Both simulations and physical examinations of the route's track geometry shall be used to determine a track segment representative of the route.
- (3) <u>Carbody acceleration</u>. For vehicle types intended to operate at track Class 6 speeds or above, or at any curving speed producing more than 5 inches of cant deficiency, qualification testing conducted over a representative segment of the route shall ensure that the vehicle type will not exceed the carbody lateral and vertical acceleration safety limits specified in § 213.333.
- (4) <u>Truck lateral acceleration</u>. For vehicle types intended to operate at track Class 6 speeds or above, qualification testing conducted over a representative segment of the

route shall ensure that the vehicle type will not exceed the truck lateral acceleration safety limit specified in § 213.333.

(5) <u>Measurement of wheel/rail forces</u>. For vehicle types intended to operate at track Class 7 speeds or above, or at any curving speed producing more than 6 inches of cant deficiency, qualification testing conducted over a representative segment of the route shall ensure that the vehicle type will not exceed the wheel/rail force safety limits specified in § 213.333.

The burden for the analysis and testing of this requirement is included under that of the qualification programs in 213.345(a) above. Consequently, there is no additional or other burden associated with this requirement.

- (d) <u>Previously qualified vehicle types</u>. Vehicle types previously qualified under this Subpart for a track class and cant deficiency on one route may be qualified for operation at the same class and cant deficiency on another route through analysis or testing, or both, to demonstrate compliance with paragraph (a) of this section in accordance with the following:
- (1) <u>Simulations or measurement of wheel/rail forces</u>. For vehicle types intended to operate at any curving speed producing more than 6 inches of cant deficiency, or at curving speeds that both correspond to track Class 7 speeds or above and produce more than 5 inches of cant deficiency, simulations or measurement of wheel/rail forces during qualification testing shall demonstrate that the vehicle type will not exceed the wheel/rail force safety limits specified in § 213.333. Simulations, if conducted, shall be in accordance with paragraph (c)(2) of this section. Measurement of wheel/rail forces, if conducted, shall be performed over a representative segment of the new route.
- (2) <u>Carbody acceleration</u>. For vehicle types intended to operate at any curving speed producing more than 5 inches of cant deficiency, or at track Class 7 speeds and above, qualification testing conducted over a representative segment of the new route shall ensure that the vehicle type will not exceed the carbody lateral and vertical acceleration safety limits specified in § 213.333.
- (3) <u>Truck lateral acceleration</u>. For vehicle types intended to operate at track Class 7 speeds or above, measurement of truck lateral acceleration during qualification testing shall demonstrate that the vehicle type will not exceed the truck lateral acceleration safety limits specified in § 213.333. Measurement of truck lateral acceleration, if conducted, shall be performed over a representative segment of the new route.

FRA estimates that approximately 50 qualification programs will be developed (including analyses and tests) under the above requirement. It is estimated that it will take approximately 40 hours to develop each qualification program and submit it to FRA. Total annual burden for this requirement is 2,000 hours.

Respondent Universe: 50 railroads
Burden time per response: 40 hours
Frequency of Response: On occasion
Annual number of Responses: 10 qualification programs
Annual Burden:

2,000 hours

**Calculation:** 50 qualification programs x 40 hrs. = 2,000 hours

(e) Qualification test plan. To obtain the data required to support the qualification program outlined in paragraphs (c) and (d) of this section, the track owner or railroad shall submit a qualification testing plan to FRA's Associate Administrator for Railroad Safety/Chief Safety Officer (FRA) at least 60 days prior to testing, requesting approval to conduct the testing at the desired speeds and cant deficiencies. This test plan shall provide for a test program sufficient to evaluate the operating limits of the track and vehicle type and shall include: (1) Identification of the representative segment of the route for qualification testing; (2) Consideration of the operating environment during qualification testing, including operating practices and conditions, the signal system, highway-rail grade crossings, and trains on adjacent tracks; (3) The maximum angle found on the gage face of the designed (newly-profiled) wheel flange referenced with respect to the axis of the wheel set that will be used for the determination of the Single Wheel L/V Ratio safety limit specified in § 213.333; (4) A target maximum testing speed in accordance with paragraph (a) of this section and the maximum testing cant deficiency; (5) An analysis and description of the signal system and operating practices to govern operations in track Classes 7 through 9, which shall include a statement of sufficiency in these areas for the class of operation; and (6) The results of vehicle/track performance simulations that are required by this section.

The burden for this requirement is included under that of 213.345(a) above. Consequently, there is no additional or other burden associated with this requirement.

(f) <u>Qualification testing</u>. Upon FRA approval of the qualification testing plan, qualification testing shall be conducted in two sequential stages as required in this Subpart.

- (1) Stage-one testing shall include demonstration of acceptable vehicle dynamic response of the subject vehicle as speeds are incrementally increased -- (i) On a segment of tangent track, from acceptable track Class 5 speeds to the target maximum test speed (when the target speed corresponds to track Class 6 and above operations); and (ii) On a segment of curved track, from the speeds corresponding to 3 inches of cant deficiency to the maximum testing cant deficiency.
- (2) When stage-one testing has successfully demonstrated a maximum safe operating speed and cant deficiency, stage-two testing shall commence with the subject equipment over a representative segment of the route as identified in paragraph (e)(1) of this section.
- (i) A test run shall be conducted over the route segment at the speed the railroad will request FRA to approve for such service.
- (ii) An additional test run shall be conducted at 5 m.p.h. above this speed.
- (3) When conducting stage-one and stage-two testing, if any of the monitored safety limits are exceeded, on any segment of track intended for operation at track Class 6 speeds or greater, or on any segment of track intended for operation at more than 5 inches of cant deficiency, testing may continue provided the track location(s) where any of the limits are exceeded is identified and test speeds are limited at the track location(s) until corrective action is taken. Corrective action may include making an adjustment in the track, in the vehicle, or both of these system components. Measurements taken on track segments intended for operations below track Class 6 speeds and at 5 inches of cant deficiency or less are not required to be reported.
- (4) Prior to the start of the qualification test program, a qualifying Track Geometry Measuring System (TGMS) specified in § 213.333 shall be operated over the intended route within 30 calendar days prior to the start of the qualification test program.

The burden for this requirement is included under that of 213.345(a) and (d) above. Consequently, there is no additional or other burden associated with this requirement.

(g) <u>Qualification testing results</u>. The track owner or railroad shall submit a report to FRA detailing all the results of the qualification program. When simulations are required as part of vehicle qualification, this report shall include a comparison of simulation predictions to the actual wheel/rail force or acceleration data, or both, recorded during full-scale testing. The report shall be submitted at least 60 days prior to the intended operation of the equipment in revenue service over the route

The burden for this requirement is included under that of 213.345(a) and (d) above. Consequently, there is no additional or other burden associated with this requirement.

- (h) Based on the test results and all other required submissions, FRA will approve a maximum train speed and value of cant deficiency for revenue service, normally within 45 days of receipt of all the required information. FRA may impose conditions necessary for safely operating at the maximum approved train speed and cant deficiency.
- (i) The documents required by this section must be provided to FRA by:
- (2) The track owner; or
- (3) A railroad that provides service with the same vehicle type over trackage of one or more track owner(s), with the written consent of each affected track owner.

FRA estimates that approximately three (3) written track owner consents will be obtained by railroads under the above requirement. It is estimated that it will take approximately eight (8) hours to obtain the written each consent. Total annual burden for this requirement is 24 hours.

Respondent Universe: 50 railroads

Burden time per response: 8 hours
Frequency of Response: On occasion
Annual number of Responses: 3 written consent

Annual Burden:

24 hours

**Calculation:** 3written consents  $x \ 8 \ hrs. = 24 \ hours$ 

Total annual burden for this entire requirement is 8,024 hours (6,000 + 2,000 + 24).

#### § 213.347 Automotive or Railroad Crossings at grade

If a train operation is projected at class 7 speed for a track segment that will include highway-rail grade crossings, the track owner must submit for FRA's approval a complete description of the proposed warning/barrier system to address the protection of highway traffic and high speed trains.

FRA estimates that zero (0) protection plans will be submitted under the above requirement. Consequently, there is no additional burden associated with it.

### 213.353 Turnouts and crossovers, generally.

For all turnouts and crossovers, and lift assemblies or other transition devices on moveable bridges, the track owner must prepare an inspection and maintenance Guidebook for use by railroad employees which shall be submitted to the Federal Railroad Administration. The Guidebook must contain at a minimum:

- (1) Inspection frequency and methodology including limiting measurement values for all components subject to wear or requiring adjustment.
- (2) Maintenance techniques.

Respondent universe is one (1) railroad (Amtrak). Since this requirement has already been fulfilled, there is no additional burden associated with it.

### 213.361 Right of Way

The track owner in Class 8 and 9 shall submit a barrier plan, termed a "right-of-way plan", to the Federal Railroad Administration (FRA) for approval. At a minimum, the plan will contain provisions in areas of demonstrated need for the prevention of —

- (1) Vandalism;
- (2) Launching of objects from overhead bridges or structures into the path of trains;
- (3) Intrusion of vehicles from adjacent rights of way.

Respondent universe is one (1) railroad (Amtrak). Since this requirement has already been fulfilled, there is no additional burden associated with it.

## 213.365 Visual Inspections

- (a.) All track shall be visually inspected in accordance with the schedule prescribed in paragraph (c) of this section by a person designated under Sec. 213.305.
- (b) Each inspection shall be made on foot or by riding over the track in a vehicle at a speed that allows the person making the inspection to visually inspect the track structure for compliance with this part. However, mechanical, electrical, and other track inspection devices may be used to supplement visual inspection. If a vehicle is used for visual inspection, the speed of the vehicle may not be more than 5 miles per hour when passing over track crossings and turnouts, otherwise, the inspection vehicle speed shall be at the sole discretion of the inspector, based on track conditions and inspection requirements. When riding over the track in a vehicle, the inspection will be subject to the following conditions -- (1) One inspector in a vehicle may inspect up to two tracks at one time provided that the inspector's visibility remains unobstructed by any cause and that the second track is not centered more than 30 feet from the track upon which the inspector is riding; (2) Two inspectors in one vehicle may inspect up to four tracks at a

time provided that the inspector's visibility remains unobstructed by any cause and that each track being inspected is centered within 39 feet from the track upon which the inspectors are riding; (3) Each main track is actually traversed by the vehicle or inspected on foot at least once every two weeks, and each siding is actually traversed by the vehicle or inspected on foot at least once every month. On high density commuter railroad lines where track time does not permit an on track vehicle inspection, and where track centers are 15 foot or less, the requirements of this paragraph (b)(3) will not apply; and (4) Track inspection records shall indicate which track(s) are traversed by the vehicle or inspected on foot as outlined in paragraph (b)(3) of this section.

(c) Each track inspection shall be made in accordance with the following schedule --

Class of track	Required frequency
6, 7, and 8	Twice weekly with at least 2 calendar-day's interval between inspections.
9	

- (d) If the person making the inspection finds a deviation from the requirements of this part, the person shall immediately initiate remedial action.
- (e) Each switch, turnout, track crossing, and lift rail assemblies on moveable bridges shall be inspected on foot at least weekly. The inspection shall be accomplished in accordance with the Guidebook required under Sec. 213.353.
- (f) In track Classes 8 and 9, if no train traffic operates for a period of eight hours, a train shall be operated at a speed not to exceed 100 miles per hour over the track before the resumption of operations at the maximum authorized speed.

The burden for this requirement is included under that of 213.369 below. Consequently, there is no additional burden associated with this requirement.

## 213.369 Inspection records.

(A) Each owner of track to which this part applies shall keep a record of each inspection required to be performed on that track under this subpart.

Except as provided in paragraph (e) of this section, each record of an inspection under § 213.365 shall be prepared on the day the inspection is made and signed by the person making the inspection. Records must specify the track inspected, date of inspection, location and nature of any deviation from the requirements of this part, and the remedial action taken by the person making the inspection.

FRA estimates that approximately 15,000 records will be kept by track owners under the above requirement. It is estimated that it will take approximately one (1) minute to record the required information. Total annual burden for this requirement is 250 hours.

Respondent Universe: 10 railroads

Burden time per response: 1 minute
Frequency of Response: On occasion
Annual number of Responses: 15,000 records

Annual Burden:

250 hours

<u>Calculation</u>: 15,000

records x 1 min. = 250

hours

(B) The owner shall designate the location(s) where each original record shall be maintained for at least one year after the inspection covered by the record. The owner shall also designate one location, within 100 miles of each state in which they conduct operations, where copies of records which apply to those operations are either maintained or can be viewed following 10 days notice by the Federal Railroad Administration.

Respondent universe is two (2) railroads (Amtrak and Metro North). Since this requirement has already been fulfilled, there is no additional burden associated with it.

(C) Rail inspection records must specify the date of inspection, the location and nature of any internal defects found, the remedial action taken and the date thereof, and the location of any intervals of track not tested per § 213.339(d). The owner shall retain a rail inspection record for at least two years after the inspection and for one year after remedial action is taken.

FRA estimates that approximately 50 records will be retained by track owners under the above requirement. It is estimated that it will take approximately five (5) minutes to record the required information. Total annual burden for this requirement is four (4) hours.

Respondent Universe: 2 railroads (Amtrak &

Metro North)
Burden time per response: 5 minutes
Frequency of Response: On occasion

Annual number of Responses: 50 records

Annual Burden:

4 hours

<u>Calculation</u>: 50

records x 5 min. = 4 hours

Total annual burden for this requirement is 254 hours (250 + 4).

Appendix D to Part 213—Minimally Compliant Analytical Track (MCAT) Simulations Used for Qualifying Vehicles to Operate at High Speeds and at High Cant Deficiencies.

(a) <u>Validation</u>. To validate the vehicle model used for MCAT simulations under this Part, the track owner or railroad shall obtain vehicle simulation predictions using measured track geometry data, chosen from the same track section over which testing is to be performed as determined by § 213.345(c)(2)(ii). These predictions shall be submitted to FRA in support of the request for approval of the qualification test plan. Full validation of the vehicle model used for MCAT simulations under this Part shall be determined when the results of the simulations demonstrate that they replicate all key responses observed during qualification testing.

The burden for this requirement is included under that of the qualification test plans above. Consequently, there is no other or additional burden associated with this requirement.

Total annual burden for this entire information collection is 1,816,152 hours.

## 13. <u>Estimate of total annual costs to respondents</u>.

As noted in the previous submission, there are no additional costs to respondents other than the hour burden costs.

#### 14. Estimate of Cost to Federal Government.

The Rail Integrity Final Rule does not really present any additional costs to FRA. The estimated costs to the Federal Government pertain more to the Part 213 requirements associated with the Vehicle/Track Interaction Safety Standards Final Rule, which was published on March 13, 2013 (78 FR 16051). Those costs are as follows (based on FY 2010 Federal Government Pay Schedule plus 75% overhead):

- 1. \$472 Section 213.333(a) & (b) Four (4) hours for FRA Track Staff Director (GS-15-5) to review request from railroads concerning track geometry measurements taken from a distance different from that specified under section 213.333(b)(1).
- 2. \$5,152 Section 213.333 (k)(1) 16 hours each for FRA Track Staff Director (GS-15-5) and two staff members (GS-14-5) to review requests for alternate location of devices for measuring lateral accelerations mounted on a truck frame.
- 3. \$16,960 Section 213.333(l) 40 hours each for FRA Track Staff Director (GS-15-5) and three staff members (GS-14-5) to review reports submitted to FRA of monitoring data collected in accordance with sections 2132.333 (j) and (k).
- 4. \$16,960 Section 213.345(a) 40 hours each for FRA Track Staff Director (GS-15-5) and three staff members (GS-14-5) to review railroad vehicle type qualification programs developed to ensure that vehicle/track system will not exceed the wheel/rail force safety limits and the carbody and truck acceleration criteria specified in section 213.333(a)(1) and 21.333(a)(2).
- 5. \$16,960 Section 213.345(a) 40 hours each for FRA Track Staff Director (GS-15-5) and three staff members (GS-14-5) to review railroad vehicle type qualification programs (that include analyses and tests) for operation at the same class and cant deficiency on another route.
- 6. \$816 Section 213.333(h) Eight (8) hours for FRA Track staff member (GS-14-5) to review written consent of track owner submitted by railroad that provides service with the same vehicle type over trackage of one or more track owner(s).

## <u>TOTAL Vehicle/Track Interaction Costs</u> = \$57,320

FRA's cost for CWR requirements (based on FY 2010 Federal Government Pay Schedule plus 75% overhead):

7. \$7,388 - 75 hours for FRA staff to review 279 revised procedures/plans (under

section 213.118, which describe the scheduling and conduct of physical track inspections to detect cracks and other incipient failures in CWR). The cost for FRA reviewing staff is equally divided between GS-13s and GS-14s.

8. \$21,402 - 235 hours for FRA staff to review 20 additional revised procedures/plans, 100 written notifications, and 20 amended training programs. The cost for FRA reviewing staff is equally divided between GS-12s, GS-13s, and GS-14s.

## **TOTAL CWR Costs** = **\$28,790**

Additionally, FRA's cost for GRMS requirements (based on FY 2005 Federal Government Pay Schedule plus 75% overhead):

- 1. \$8,300 16 hours for 2 GS-14s to review technical data + 30 hours for 2 GS-13s to review notifications.
- 2. \$426 6 hours for one GS-12 to review training programs.

Total GRMS Costs = \$8,726

**GRAND TOTAL COST = \$94,836** 

# 15. Explanation of program changes and adjustments.

The total burden for this information collection submission has <u>decreased</u> by **659,546 hours** from the last approved submission. The decrease in burden is <u>due</u> solely to **adjustments**. The following table itemizes all **adjustments**:

#### **TABLE FOR ADJUSTMENTS**

Part 213	Responses &	Responses &	Burden	Burden	Difference
Section	Avg. Time	Avg. Time	Hours	Hours (This	(plus/minus)
	(Previous	(This	(Previous	Submission)	
	Submission)	Submission)	Submission)		
		,	,		

213.7(c) (1&2) – Comprehensive CWR Training	80,000 employees 8 hours	10,000 employees 4 hours	640,000 hours	40,000 hours	600,000 hrs. 70,000 resp.
- (c)(3) Written authorization to employee to prescribe CWR remedial actions & successful completion of recorded exam on CWR procedures as part of qualification process	80,000 authorizations @ 10 min. ea. + 80,000 recorded exams @ 60 min. ea.	10,000 authorizations @ 10 min. ea. + 10,000 recorded exams @ 60 min. ea.	93,333 hours	11,667 hours	81,666 hours 140,000 resp.
(d) Persons partially designated to supervise certain renewals and inspect track	250 designations 10 minutes	1,000 partial designations 10 minutes	42 hours	167 hours	+ 125 hours + 750 responses
213.17 – Waivers	6 petitions 24 hours	6 petitions 72 hours	144 hours	432 hours	+ 288 hours 0 responses
213.110A(a) – Notification to FRA of implementation of GRMS on line segment + submission of technical report establishing compliance with minimum GRMS design requirements	5 notifications + 1 tech report 45 minutes + 4 hours	1 notifications + 1 tech report 45 minutes + 4 hours	8 hours	5 hours	3 hours 4 responses
213.110d(j) – Documentation procedures for GRMS vehicles	4 procedures 2 hours	1 procedure 2 hours	8 hours	2 hours	6 hours 3 responses
- f(j) Record of 2 most recent GRMS inspections	50 records 2 hours	50 records 1 hour	100 hours	50 hours	50 hours 0 responses

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213.118(a-c) –	279 plans	100 plans	1,116 hours	400 hours	716 hours
Revised CWR	4 hours	4 hours			179 responses
plans	370 10	100			
(d) Railroad	279 notifications	100 notifications	2,737 hours	733 hours	2,004 hours
notification to	+ 80,000 notice	+ 10,000 notice			
FRA and all					70.170
employees of	15 min. + 2 min.	15 min. + 2 min.			70,179 resp.
CWR plan	15 111111, 1 2 111111,	15 111111. 1 2 111111.			
effective date					
213.119(i) –	80,000 retrained	10,000 retrained	40,000 hours	40,000 hours	0 hours
Annual CWR	employees	employees			70,000 resp.
retraining of	30 minutes	4 hours			
employees					
- Records of	2,000 records	10,000 records	333 hours	333 hours	0 hours
employee CWR	10 minutes	2 minutes			+ 8,000 resp.
retraining					
213.233 – Track	12,500 notations	300,000 notations	208 hours	5,000 hours	+ 4,792 hours
inspections:	1 minute	1 minute		s,ooo nours	+ 287,500 resp.
notation on					207,500 resp.
inspection form as					
to which track					
inspectors were on					
213.237 – Request	50 requests	10 requests	13 hours	3 hours	10 hours
to FRA to change	15 minutes	15 minutes	15 Hours	S Hours	40 responses
designation of rail	15 minutes	15 minutes			40 responses
inspection					
segment					
213.305(a-c) –	20 designations	200 designations	3 hours	33 hours	+ 30 hours
Designation of	10 minutes	10 minutes	S nours	SS Hours	+ 180 responses
persons partially	10 minutes	10 minutes			100 lesponses
qualified to					
maintain/inspect					
CWR track for					
compliance with					
Federal					
regulations					
105ulutions					

	ı	1	1		
213.329(e) – RR	2 documents	200 documents	160 hours	800 hours	+ 640 hours
transmission to	80 hours	4 hours			+ 198 responses
FRA of testing					
results required by					
paragraph (d) of					
this section					
- (f) Notification	3 notifications	20 notifications			
			120 hours	800 hours	+ 680 hours
to FRA 30 days in	40 hours	40 hours			+ 17 responses
advance of					17 Tesponses
proposed					
implementation of					
higher curving					
speeds					
- (g) Written	3 written consents	20 written	2 hours	15 hours	+ 13 hours
consent of each	45 minutes	consents		10 110413	1
affected track		45 minutes			+ 17 responses
owner to have					
railroad providing					
same vehicle type					
supply required					
documents to FRA	40	<b>5</b> 0	2001	<b>5</b> 00.1	. 440.1
213.333 (d) -	18 reports	50 reports	360 hours	500 hours	+ 140 hours
Output reports	20 hours	10 hours			+ 32 responses
from qualifying					
TGMS vehicle					
(g) - Exception	13 reports/records	50 reports/records	260 hours	500 hours	+ 240 hours
reports/additional	20 hours	10 hours		500 Hours	1
records					+ 37 responses
-(j)(1)-Notification	10 notifications	2 notifications	400 hours	20 harre	200 have
to track personnel	40 hours	10 hours	400 110013	20 hours	380 hours
when onboard					8 responses
acccelerometers					
indicate a possible					
track related					
problem	10	1	_	4.1	200 have
-(k)(1) – Railroad	10 requests	1 request	400 hours	1 hour	399 hours
request to FRA for	40 hours	1 hour			9 responses
an alternate					
location of devices					
measuring lateral					
acceleration					
- (l) – Railroad	4 reports	1 report	32 hours	8 hours	24 hours
report to FRA	8 hours	8 hours			3 responses
providing an					J responses
analysis of					
monitoring data					
collected in					
accordance with					
paragraphs (j) &					
(k) of this section					
for track classes 8					
& 9					

213.341 – Track owner copy of rail manufacturer's report of	2 reports 16 hours	20 reports 16 hours	32 hours	320 hours	+ 288 hours + 18 responses
inspection new rail - Track owner copy of rail manufacturer's report of new	2 reports 16 hours	0 reports 0 hours	32 hours	0 hours	32 hours 2 responses
welds - Record of inspection of field welds	125 records 20 minutes	1,000 records 20 minutes	42 hours	333 hours	+ 291 hours + 875 responses
213.343 – Record of CWR work that does not conform with written procedures	150 records 10 minutes	3,000 records 4 hours	25 hours	12,000 hours	+ 11,975 hours + 2,850 resp.
213.345 – (a) Qualification program for vehicles operating at track classes 6 speeds or above, or at any curing speed producing more than 5 inches	10 programs 120 hours	50 programs 120 hours	1,200 hours	6,000 hours	+ 4,800 hours + 40 responses
of cant deficiency - (d) Qualification program for vehicles operating at track classes 7speeds or above, or at any curing speed producing more than 6inches of cant deficiency	10 programs 80 hours	50 programs 40 hours	800 hours	2,000 hours	+ 1,200 hours + 40 responses
- (g) Written consent of affected track owner to permit railroad providing service with the same vehicle type over trackage to provide required documents to FRA	1 written consent 8 hours	3 written consents 8 hours	8 hours	24 hours	+ 16 hours + 2 responses
213.347 – Track owner protection plan for train	2 protection plans 8 hours	0 protection plans )8 hours	16 hours	0 hours	16 hours 2 responses

operations at class 7 speed for track segment that will include highway- rail grade crossings					
213.369 – Inspection records require by this Subpart	500 records 1 minute	15,000 records 1 minute	8 hours	250 hours	+ 242 hours + 14,500 resp.

**Adjustments** above <u>decreased</u> the burden by 659,546 hours and <u>decreased</u> the number of responses by 35,373.

The current OMB inventory shows a total burden of 2,475,698 hours, while the present submission exhibits a total burden of 1,816,152 hours. Hence, there is a total <u>decrease</u> of **659,546 hours**.

There is <u>no</u> change in costs to respondents.

## 16. Publication of results of data collection.

There will be no publications involving these information collection requirements.

# 17. Approval for not displaying the expiration date for OMB approval.

Once OMB approval is received, FRA will publish the approval number for these information collection requirements in the <u>Federal Register</u>.

# 18. Exception to certification statement.

No exceptions are taken at this time.

# Meeting Department of Transportation (DOT) Strategic Goals

This information collection supports the top DOT strategic goal, namely transportation safety. Specifically, without the information collected under § 213.237, FRA would not know – and not be able to determine whether it is safe – that the track owner/railroad conducted necessary rail inspections sufficient to maintain prescribed service failure target rate and if the track owner/railroad was justified in changing the designation of a rail inspection segment or establishing a new segment for track that is Class 4 or 5 track, or Class 3 track that carries regularly-scheduled passenger trains or is a hazardous materials route and is used to determine the milepost limits for the individual rail inspection frequency. The requirement mandating FRA approval serves to ensure that the track owner/railroad does not have the ability to freely alter a defined segment length in order to compensate for a sudden increase of detected defects and service failures which might enable them to carry out a less frequent test cycle and increase the risk of greater numbers of rail accidents/incidents. Moreover, FRA believes that altering existing railroad segment lengths without extensive data and research would be financially burdensome to individual railroads and detrimental to their established maintenance programs, without yielding significant safety benefits.

Also, without the information collected under § 213.237, neither FRA nor rail employees would know the effective date of this requirement. FRA then could not carry out its safety monitoring and enforcement program without this information. Without this information, railroad employees would not know when to begin their inspection and, where necessary, remedial/repair duties. Also, without the notification required in this section, FRA would not know when service failure target rates prescribed in paragraph (a) are not achieved and would not have necessary information about why the performance target was not achieved or any details of the track owner's/railroad's remedial action plans. Rail safety would be significantly jeopardized without this critical information.

Without the information collected under § 213.333, § 213.345, and Appendix D, there might be increased numbers of rail accidents/incidents with corresponding injuries and fatalities to railroad passengers and rail employees, as well as significant property damage to rail equipment, if FRA could not ensure the safe movement of trains relating to the interaction of rail vehicles with the track over which they travel during high speed and high cant deficiency train operations. It is especially important to collect the information under these provisions to facilitate and accelerate the safe transition to increased high speed (and high cant deficiency) train operations throughout the United States. This is a top Administration priority, and billions of dollars are now being

invested to enable the United States to catch up to Asia and Europe in the availability and popularity of high speed rail travel.

Without this collection of information, there might be more derailments with corresponding injuries and fatalities to railroad personnel and passengers, as well as significant amounts of property damage, if FRA could not ensure that adequate procedures were in place to detect and correct defects in continuous welded rail (CWR) track, particularly regarding defects involving rail joints in CWR. Without this collection of information, there would be no way that FRA could ensure that railroads/track owners develop and implement plans containing procedures (or alternate procedures) which describe the scheduling and conduct of physical track inspections to detect cracks and other indications of incipient failure in CWR. Without such procedures, railroads would have no thorough and systematic way to examine CWR track and detect any of the following: (i) joint bars with visible or otherwise detectable cracks; (ii) loose, or bent, or missing joint bolts; (iii) rail end batter or mismatch that contributes to instability of the joint; and (iv) evidence of excessive longitudinal rail movement in or near the joint, including – but not limited to – wide rail gap, defective joint bolts, or displaced anchors. Such defects could lead to an increased number of derailments, with corresponding increased casualties, if left undiscovered and uncorrected.

Without the information collected under § 213.7, § 213.118, and § 213.119, FRA would have no way to ensure that railroads have comprehensive CWR training programs and no way of knowing whether individuals designated by track owners to inspect CWR track or supervise the installation, adjustment, and maintenance of CWR track have completed the required comprehensive training course and are actually qualified to perform such duties. If unqualified individuals who had not completed the required CWR procedures recorded examinations and who had not received written authorization from track owners to prescribe remedial actions were to carry out tasks related to the installation, adjustment, and maintenance of CWR track, there might be a greater number of accidents/incidents and corresponding injuries and fatalities because trains derailed as a result of incomplete or improper work.

Without this collection of information, FRA would have no way to ensure that periodic and follow-up inspections of CWR rail and CWR rail joints were actually performed. Without the required records mandated by § 213.119, FRA would have no way to verify whether all of the approximately 360,000 rail joints nationwide have been placed in the rail joint record inventory and periodically inspected to catch and correct defects before they lead to train accidents/incidents. Without these necessary records, FRA would lose an extremely valuable tool to ensure compliance with this regulation and FRA's overall safety program.

Without the information collected under § 213.119(k) that requires CWR manuals containing the track owner's CWR procedures, all revisions, appendices, updates, and

reference materials related thereto at ever job site where personnel are assigned to install, inspect, and maintain CWR, railroad supervisors and employees would be deprived of an essential and authoritative resource to answer questions, resolve problems, and clarify proper procedures to ensure that all CWR work is done completely and correctly. Without these completely current CWR procedures manuals, supervisors and their employees might perform CWR work that they believed was done completely and correctly but which did not actually follow their employers requirements or Federal safety regulatory requirements. This could lead to increased numbers of accidents/incidents on CWR track.

Without this collection of information, there would be no way to facilitate and monitor the implementation of the Gage Restrain Measurement System (GRMS) technology. Presently, the maintenance decisions which determine crosstie and rail fastener replacement within the industry rely heavily on visual inspections made by maintenance personnel whose subjective knowledge is based on varying degrees of experience and training. The subjective nature of these inspections sometimes results in inconsistent determinations about the ability of individual crossties and rail fasteners to maintain adequate gage restraint. GRMS technology offers a better, more objective method to determine the ability of crossties and rail fasteners to maintain adequate gage restraint. It is well known within the rail industry that crossties of questionable condition left too long can cause wide-gage derailments. By collecting the required GRMS information, FRA can ensure the following: that GRMS is implemented on appropriate segments of track on a regional (eventually a national) basis; that GRMS design requirements have been met; that GRMS vehicles have been properly calibrated so that the integrity of the data they provide is maintained; and that suitable GRMS training programs have been established by track owners so that persons fully qualified under §213.7 are properly trained in this new technology. FRA's facilitation of the implementation of GRMS technology serves to improve rail safety by reducing the likelihood of wide-gage derailments caused by crossties and rail fasteners which had not been replaced in a timely manner.

Other information collected and reviewed by FRA as a result of the Track Safety Standards, particularly written records, enhance rail safety by ensuring that track owners designate only qualified persons to inspect and maintain track, and to supervise restorations and renewals of track under traffic conditions. The list of qualified persons to inspect or repair track is updated as new employees become qualified. These individuals must be able to demonstrate to track owners that they have the necessary experience and knowledge so that they can detect deviations from the requirements of this Part and prescribe appropriate remedial action to correct or safely compensate for those deviations. Each designated individual, including contractor personnel engaged by the track owner, must have written authorization from the track owner to prescribe remedial actions, and must have successfully completed a recorded examination. Consequently, these persons will better be able to identify rail defects and rail mismatches; determine the condition of crossties; evaluate track surface and alignment; ascertain gage restraint; and discern the maximum distance between rail ends over which

trains may be allowed to pass. This, in turn, will help to reduce the number of accidents/incidents and corresponding injuries, deaths, and property damage. Inspection records are extremely important and are used by Federal and State investigators in the enforcement of the Track Safety Standards, and thus help promote rail safety. Track inspection records must indicate which track(s) are traversed by a vehicle that allows qualified persons to visually inspect the structure for compliance with this Part and which track(s) are inspected by foot, as outlined in paragraph (b)(2) of § 213.233. Records must be prepared on the day the inspection is made, and must be signed by the person making the inspection. Further, records must specify the track inspected, date of inspection, location and nature of any deviation from the requirements of Part 213, the location of any intervals of track not tested per § 213.237(d), and the remedial action taken by the person making the inspection. Track owners are required to retain inspection records for at least two years after the actual inspection and for one year after the remedial action is taken. The frequency of inspection is related to the rate of track degradation, and a relaxation of that frequency would increase the risk of an accident caused by a defect that had not been detected. In the event of a train accident/incident, particularly one implicating track structure, these inspection records provide invaluable investigatory assistance in determining the exact cause(s) of the accident/incident and also provide keen insight in designing appropriate remedial measures/programs.

In sum, the information collected aids FRA in its primary mission, which is to promote and enhance rail safety throughout the nation.

In this information collection as in all its information collection activities, FRA seeks to do its very best to fulfill DOT Strategic Goals and to be an integral part of One DOT.