

## Track Inspector Survey

Please return this survey by February 1, 2010 in the enclosed envelope.

If you have questions, please contact:

Amanda DiFiore  
781.684.3978  
adifiore@foster-miller.com

Judy Gertler  
781.684.4270  
jgertler@foster-miller.com

*The Federal Railroad Administration (FRA) is conducting a study of track inspection time. The purpose of the study is to develop an understanding of the current industry practices as required by the Rail Safety Improvement Act of 2008. The study results will inform possible future FRA policy and regulatory actions, and, in general, will contribute to overall railroad operational safety.*

*The data collected from this study will be used primarily for statistical purposes, and is authorized by law (49 U.S.C. 20901). Your participation in this study is completely voluntary. Your personal information will be kept private to the extent permitted by law, and will not be disclosed to anyone other than employees and contractors who work on this study.*

*Public reporting burden for this information collection is estimated to average 30 minutes per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing this collection of information. Please note that an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The OMB control number for this information collection is OMB No. 2130-XXXX and the expiration date is YYYY.*

### Instructions

Fill in the bubbles to indicate your answer.  
Use black or blue ballpoint pen or a Number 2 pencil.

Please fill in marks like this: ● ○ ○

Not like this: ⊗ ⊕ ⊖

## Your Job

How long have you worked as a track inspector? \_\_\_\_\_ years

How long have you worked on your assigned territory? \_\_\_\_\_ years

How were you initially trained to perform track inspections? (mark all that apply)

- company training program
- on-the-job training
- other

What types of subsequent training have you had for your current position? Indicate how often you have had the training.

|   | Never                    | Every other year         | Every year               | More frequently          |
|---|--------------------------|--------------------------|--------------------------|--------------------------|
| on-the-job training   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| FRA track standards training                                    | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| FRA safety standards training (e.g., roadway worker protection) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| other track inspection related training (please specify below)  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Specify other track inspection related training if applicable

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Do you have job briefings?  Yes  No (Skip to **Your Work Day**)

If you have job briefings, please answer the following:

How are your job briefings conducted?

- in-person
- on the phone

How often do you have job briefings?

- daily
- more than once a day
- other (Please specify): \_\_\_\_\_

Which of the following are included in your job briefings?

- slow orders on territory
- recent accidents
- recent derailments
- results of track geometry inspections
- results of special inspections
- rough ride reports
- spot maintenance
- mechanized maintenance
- specialized equipment movement (e.g., rail flaw detection car)
- other (Please specify): \_\_\_\_\_

## Your Work Day

Scheduled length of your work day: \_\_\_\_\_ hours

In the past month, how many days have you worked longer than the scheduled length of your workday?

- none   
  1 - 5   
  6 - 10   
  11 - 15   
  >15

In the past month, how many times did you work on a rest day?

- none   
  1   
  2   
  3   
  4   
  5   
  >5

On a typical day in the past month, how much time did you spend doing each of the following:

|  | Time (minutes)        |                       |                       |                       |                       |                       |                       |                       |                       |
|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
|  | 0-15                  | >15-30                | >30-45                | >45-60                | >60-75                | >75-90                | >90-105               | >105-120              | >120                  |
| Travel (from reporting point to start of inspection) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Non-inspection duties                                | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Job briefings  | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Waiting for track time                               | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Reporting inspection results                         | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Lunch and breaks                                     | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

|            | Time (hours)          |                       |                       |                       |                       |                       |                       |                       |                       |                       |
|------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
|            | 1                     | 2                     | 3                     | 4                     | 5                     | 6                     | 7                     | 8                     | 9                     | 10                    |
| Inspection | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Repair     | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

On a typical day, how many miles of *track* do you inspect? \_\_\_\_\_miles

(If you inspect 10 miles of double track, write 20; if 10 miles of triple track, write 30, etc.)

Which conditions cause you to adjust the speed of your inspection?

- time pressure to complete work                       inadequate track time  
 weather     highway crossings  
 interlocks     dispatcher decisions  
 other (Please specify): \_\_\_\_\_

## Your Territory

Number of Track Miles - **Mainline** \_\_\_\_\_

Number of Track Miles - **Siding** \_\_\_\_\_

Number of Sites - **Industry Track** \_\_\_\_\_

Number of Sites - **Yard Track** \_\_\_\_\_

Class of main track (check all that apply):

- |                              |                                   |
|------------------------------|-----------------------------------|
| <input type="radio"/> Exempt | <input type="radio"/> 4           |
| <input type="radio"/> 1      | <input type="radio"/> 5           |
| <input type="radio"/> 2      | <input type="radio"/> 6 and above |
| <input type="radio"/> 3      |                                   |

Territory characteristics (check all that apply):

- |   |   |   |
|---|---|---|
| <input type="radio"/> single track                  | <input type="radio"/> desert terrain      | <input type="radio"/> tunnels           |
| <input type="radio"/> double track                  | <input type="radio"/> mountainous terrain | <input type="radio"/> bridges           |
| <input type="radio"/> more than double track        | <input type="radio"/> concrete ties       | <input type="radio"/> highway crossings |
| <input type="radio"/> CWR                           | <input type="radio"/> urban area          |   |
| <input type="radio"/> other (Please specify): _____ |   |   |

My territory consists of:

|               | Mostly                | Some                  | Not<br>much           | Maximum curvature |
|---------------|-----------------------|-----------------------|-----------------------|-------------------|
| Curved Track  | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | _____             |
| Tangent Track | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | n/a               |

## Inspection Procedure

Using the following scale, rate how often you use the following methods to inspect your territory:

by high-rail

Only method I use  
 Use most of the time  
 Use some of the time  
 Rarely use  
 Never use

on foot

inspect by other method (please specify below)

Specify other inspection method if used: \_\_\_\_\_

If by hi-rail, at what speed do you inspect:

| Track Characteristic   | Speed (mph) |
|------------------------|-------------|
| straight CWR           | _____       |
| straight jointed track | _____       |
| control points         | _____       |
| curves                 | _____       |

I conduct inspections (check one)

- alone  with another inspector  
 mostly alone  mostly with another inspector

In the past year, how frequently did your roadmaster/track supervisor go over your territory with you?

- monthly  quarterly  less frequently

What prompts you to conduct a special inspection?

- weather/climate  short-term change in traffic pattern  
 report of dragging equipment  train going into emergency  
 signal malfunction  derailment  
 report from automated inspection  locomotive engineers' feedback  
 other (Please specify): \_\_\_\_\_

How many times in the last month did you conduct a special inspection?

- never  1-5  6-10  11-15  16-20  >20

In the past month, how many hours did you spend on special inspections? \_\_\_\_\_ hours

Which of the following do you have with you when inspecting?

- calipers  PTLF  
 clip inserter/remover  gage bar  
 elastic clips  bolts  
 tape measure  spike maul  
 stringline  level board  
 spikes  rail thermometer  
 set of joint bars  
 other (Please specify): \_\_\_\_\_

I do not have the following with me when inspecting, but would find it useful:

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How do you commonly detect each condition? (Fill in all that apply.)

| Track Condition  | Visual - On Foot | Visual - Hi-rail | Results from automated inspection | Not readily detectable | Not applicable in my territory |
|--|------------------|------------------|-----------------------------------|------------------------|--------------------------------|
| <b>Geometry</b>  |                  |                  |                                   |                        |                                |
| Gage dimension less than/greater than allowable                                  | 0                | 0                | 0                                 | 0                      | 0                              |
| Alinement deviation exceeds allowable  | 0                | 0                | 0                                 | 0                      | 0                              |
| Maximum crosslevel exceeds allowable   | 0                | 0                | 0                                 | 0                      | 0                              |
| Runoff at end of raise exceeds allowable   | 0                | 0                | 0                                 | 0                      | 0                              |
| Deviation from uniform profile on either rail exceeds allowable                  | 0                | 0                | 0                                 | 0                      | 0                              |
| Difference in crosslevel (warp) exceeds allowable                                | 0                | 0                | 0                                 | 0                      | 0                              |
| Reverse elevation on curve exceeds allowable                                     | 0                | 0                | 0                                 | 0                      | 0                              |
| <b>Ballast</b>   |                  |                  |                                   |                        |                                |
| Insufficient ballast   | 0                | 0                | 0                                 | 0                      | 0                              |
| Fouled ballast   | 0                | 0                | 0                                 | 0                      | 0                              |
| <b>Ties</b>  |                  |                  |                                   |                        |                                |
| Ineffective/defective ties   | 0                | 0                | 0                                 | 0                      | 0                              |
| Rail seat abrasion   | 0                | 0                | 0                                 | 0                      | 0                              |
| Track constructed without crossties does not effectively support track structure | 0                | 0                | 0                                 | 0                      | 0                              |
| <b>Rail/joints</b>   |                  |                  |                                   |                        |                                |
| Broken rail  | 0                | 0                | 0                                 | 0                      | 0                              |
| Worn rail  | 0                | 0                | 0                                 | 0                      | 0                              |
| Rail-end mismatch  | 0                | 0                | 0                                 | 0                      | 0                              |
| Cracked or broken joint bar  | 0                | 0                | 0                                 | 0                      | 0                              |
| Insufficient number of joint bolts   | 0                | 0                | 0                                 | 0                      | 0                              |
| Loose/worn joint bolts   | 0                | 0                | 0                                 | 0                      | 0                              |
| Torch-cut or burned-bolt hole in rail  | 0                | 0                | 0                                 | 0                      | 0                              |

How do you commonly detect each condition? (Fill in all that apply.)

| Track Condition  | How do you commonly detect each condition? (Fill in all that apply.) |                  |                                   |                        |                                |
|--|--|------------------|-----------------------------------|------------------------|--------------------------------|
|  | Visual - On Foot   | Visual - Hi-rail | Results from automated inspection | Not readily detectable | Not applicable in my territory |
| <b>Switches</b>  |  |                  |                                   |                        |                                |
| Stock rail/switch point not seated or functioning as intended                                  | 0  | 0                | 0                                 | 0                      | 0                              |
| Loose, worn, or missing switch components  | 0  | 0                | 0                                 | 0                      | 0                              |
| <b>Fasteners/anchors</b>   |  |                  |                                   |                        |                                |
| Insufficient/ineffective fasteners   | 0  | 0                | 0                                 | 0                      | 0                              |
| Insufficient anchors to restrain rail movement at turnouts or CWR                              | 0  | 0                | 0                                 | 0                      | 0                              |
| <b>Frogs</b>   |  |                  |                                   |                        |                                |
| Insufficient flangeway depth/width   | 0  | 0                | 0                                 | 0                      | 0                              |
| Worn or defective frog/frog components   | 0  | 0                | 0                                 | 0                      | 0                              |
| <b>Miscellaneous</b>   |  |                  |                                   |                        |                                |
| Heat kinks   | 0  | 0                | 0                                 | 0                      | 0                              |
| Right-of-way obstructions  | 0  | 0                | 0                                 | 0                      | 0                              |
| Object between base of rail and the bearing surface of the tie plate causing concentrated load | 0  | 0                | 0                                 | 0                      | 0                              |
| Insufficient/defective tie plates  | 0  | 0                | 0                                 | 0                      | 0                              |
| Missing or damaged signage   | 0  | 0                | 0                                 | 0                      | 0                              |
| Track washouts   | 0  | 0                | 0                                 | 0                      | 0                              |
| Poor drainage/pumping ties   | 0  | 0                | 0                                 | 0                      | 0                              |
| Excessive vegetation   | 0  | 0                | 0                                 | 0                      | 0                              |
| Defective derail condition(s)  | 0  | 0                | 0                                 | 0                      | 0                              |

Which of the following repairs do you make while inspecting?

alone?

w/another inspector?

|                          |                          |                          |                          |                          |                          |
|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 0                        | 0                        | 0                        | 0                        | 0                        | 0                        |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 0                        | 0                        | 0                        | 0                        | 0                        | 0                        |

How do you report the results of your inspection?

paper reporting

electronic reporting

|                          |                          |                          |                          |
|--------------------------|--------------------------|--------------------------|--------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 0                        | 0                        | 0                        | 0                        |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 0                        | 0                        | 0                        | 0                        |

What type of reporting do you prefer?

paper  electronic

What other types of inspections are done on your territory?

- ultrasonic rail flaw detection
- gage restraint measurements
- none
- other (Please specify): \_\_\_\_\_
- track geometry measurements
- vehicle track interaction

Rate the usefulness of the following technologies:

ultrasonic rail flaw detection

track geometry measurements

gage restraint measurements

vehicle track interaction

|                          |                          |                          |                          |                          |                          |
|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 0                        | 0                        | 0                        | 0                        | 0                        | 0                        |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 0                        | 0                        | 0                        | 0                        | 0                        | 0                        |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 0                        | 0                        | 0                        | 0                        | 0                        | 0                        |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 0                        | 0                        | 0                        | 0                        | 0                        | 0                        |

Please comment on any other aspect of the inspection process that you would like the FRA to consider in preparing its Report to Congress.