# FEDERAL RAILROAD ADMINISTRATION
# GUIDE FOR PREPARING
# U.S. DOT CROSSING INVENTORY FORMS

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

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# I. INTRODUCTION

This Guide for Preparing U.S. DOT Crossing Inventory Forms (Guide) is intended to provide guidance to operating railroads and States on completing the U.S. DOT Crossing Inventory Form (Inventory Form) for highway-rail and pathway crossings.

The type of crossing will dictate which parts of the Inventory Form must be completed by operating railroads for the initial reporting of new and previously unreported highway-rail and pathway crossings. The Inventory Form will be considered "completed" if the following parts are completed:

- Public Highway-Rail Grade Crossing: Complete entire Inventory Form (with the exception of I.20 and III.2.K.);

- Private Highway-Rail Grade Crossing: Complete Header, plus Parts I, II, and III.2.K. of the Inventory Form and the Submission Information section;

- Public Pathway Grade Crossing: Complete Header, plus Parts I and II of the Inventory Form (with the exception of I.20) and the Submission Information section;

- Private Pathway Grade Crossing: Complete Header, plus Parts I, II, and III.2.K. of the Inventory Form and Submission Information section;

- Pedestrian Station Grade Crossing (pedestrian station.): Complete Header, plus Parts I and II of the Inventory Form (with the exception of I.20) and Submission Information section;

- Grade-separated Crossing (highway-rail, pathway, and pedestrian station): Complete Header, plus Part I of the Inventory Form (with the exception of I.20) and the Submission Information section.

  Please refer to the Crossing Inventory Responsibility Table in Appendix B for detailed instructions regarding which data fields must be verified or updated at least every 3 years by the primary operating railroad, as part of the periodic updating process.

  When there has been a change in crossing characteristics (such as a change in the crossing surface or a change in the crossing warning devices) at a public highway-rail grade crossing, as required by Title 49 Code of Federal Regulations (CFR) Section 234.411(c), complete all of the data fields in the Header of the Inventory Form, check the "Change in Data" box in "Reason for Update" field and update all data fields in Parts II and III on the Inventory Form. If a hardcopy

Inventory Form update will be submitted to the Crossing Inventory, complete the Submission Information section of the Inventory Form as well.

### Hardcopy Submission

Please see FRA's Web site for the correct mailing address for hardcopy U.S. DOT Crossing Inventory (Crossing Inventory) Submissions.

### Electronic Submission

Completed Inventory Forms may also be submitted electronically to the Crossing Inventory. Detailed instructions for the electronic submission of Inventory Forms can be found in the Electronic Submission Instructions, which is a separate document.

### Updates to this Guide

Please refer to FRA's Web site for updates to this Guide.

# II. INSTRUCTIONS FOR COMPLETING THE U.S. DOT CROSSING INVENTORY FORM

## 1. Header Information

All Header data must be entered by the reporting agency

Instructions for the initial reporting of the following types of new or previously unreported crossings: For public highway-rail grade crossings, complete the entire inventory Form. For private highway-rail grade crossings, complete the Header, Parts I and II, and the Submission Information section. For public pathway grade crossings (including pedestrian station grade crossings), complete the Header, Parts I and II, and the Submission Information section. For Private pathway grade crossings, complete the Header, Parts I and II, and the Submission Information section. For grade-separated highway-rail or pathway crossings (including pedestrian station crossings), complete the Header, Part I, and the Submission Information section. For changes to existing data, complete the Header, Part I Items 1-3, and the Submission Information section, in addition to the updated data fields. Note: For private crossings only, Part I Item 20 and Part III Item 2.K. are required unless otherwise noted. An asterisk * denotes an optional field.

| A. Revision Date (MM/DD/YYYY) ____/____/_____ | B. Reporting Agency ☐ Railroad ☐ Transit ☐ State ☐ Other | C. Reason for Update (Select only one) ☐ Change in Data ☐ New Crossing ☐ Closed ☐ No Train Traffic ☐ Quiet Zone Update ☐ Re-Open ☐ Date Change Only ☐ Change in Primary Operating RR ☐ Admin. Correction | D. DOT Crossing Inventory Number |
|---|---|---|---|

**Figure 2-1: U.S. DOT-FRA Crossing Inventory Form Heading**

### Instructions

A brief set of instructions is provided at the top of the form.

### A. Revision Date:

**A. Revision Date**
*(MM/DD/YYYY)*
_____/_____/_____

**Figure 2-2: U.S. DOT-FRA Crossing Inventory Form Heading, Item A**

Enter the date that the revision is being submitted in **MM/DD/YYYY** format.
**Example:** July 23, 2010, would be entered as **07/23/2010**.

For hardcopy Inventory Form submissions, the revision date should be the certified mailing date.

### B. Reporting Agency:

**B. Reporting Agency**
☐ Railroad ☐ Transit
☐ State ☐ Other

**Figure 2-3: U.S. DOT-FRA Crossing Inventory Form Heading, Item B**

Enter a check in the appropriate box to indicate the type of agency that is submitting the update or the establishment of a new crossing.

The "Transit" box should be checked by urban rapid transit operators who submit crossing data to the Crossing Inventory, including:

- Urban rapid transit operators who operate through highway-rail grade crossings and pathway grade crossings located on the same track used by railroads that are part of the general railroad system of transportation.

- Urban rapid transit operators who operate through highway-rail grade crossings and pathway grade crossings that are located within a shared corridor or right-of-way, and shared crossing warning devices, with railroads that are part of the general railroad system of transportation.

- Urban rapid transit operators who do not have one of the above-listed connections to the general railroad system of transportation, yet operate through highway-rail crossings and pathway crossings. (Urban rapid transit operators in this last category are encouraged, but not required, to submit crossing data to the Crossing Inventory.)

The "Other" box should be checked by public authorities who submit crossing data to the Crossing Inventory for quiet zone-related purposes. The "Other" box should not be checked by delegated users or third-party entities who are submitting crossing data on behalf of a railroad or State user. Delegated users are instructed to check the box that applies to the entity on whose behalf the crossing data is being submitted.

Public authorities who submit crossing data to the Crossing Inventory have been instructed to use hardcopy Inventory Forms for this purpose. Therefore, crossing data submitted electronically will not be accepted by the Grade Crossing Inventory System (GCIS) if the "Other" box has been checked.

## C. Reason for Update:

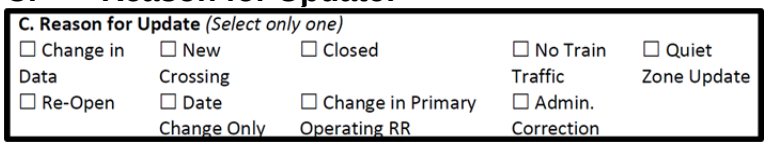



**Figure 2-4: U.S. DOT-FRA Crossing Inventory Form Heading, Item C**

Check **only one box** to indicate the primary reason for the change.

The nine checkbox selections account for the various reasons for submitting an update. These include the following:

- **Change in Data** – Submission of crossing data associated with an actual change in crossing characteristics that is not reflected by any of the other box selections below.

This includes cases where crossing type is changed from “Private” to “Public” for a highway-rail grade crossing; the entire Inventory Form (or its electronic equivalent) must be completed. Please reference Part I, Box 17.

- **New Crossing** – An open crossing that is not currently in the Crossing Inventory. This could be either a new crossing or one that was previously unreported.

- **Closed** – A location where a previous crossing no longer exists because either the railroad tracks have been physically removed, or each pathway or roadway approach to the crossing has been physically removed, leaving behind no intersection of railroad tracks with either a pathway or roadway. A grade-separated highway-rail or pathway crossing that has been physically removed is also considered a closed crossing.

- **No Train Traffic** – A crossing through which trains no longer operate.

  Note: The primary operating railroad is responsible for updating the Crossing Inventory to reflect that a highway-rail grade crossing or pathway grade crossing is no longer subject to train traffic. This update should be made as soon as possible, but must be made no later than the next required periodic update. When the Crossing Inventory is updated to reflect a change to No Train Traffic status, Parts II.1 and II.3 must be changed to reflect all zeros and the Part II.2 must reflect the current year the update is made.

- **Re-Open** – A closed crossing or crossing that was not previously subject to train traffic which has been placed into active service.

  Note: The primary operating railroad is responsible for updating the Crossing Inventory to reflect that a highway-rail grade crossing or pathway grade crossing has been placed into active service. This update should be made as soon as possible, but must be made no later than the next required periodic update.

- **Date Change Only** – An update to indicate that crossing data has not changed since the last update to the Crossing Inventory. If this box is checked, the GCIS will not allow changes to be made to any other data fields in the Crossing Inventory prior to submission.

- **Change in Primary Operating RR** – A change in primary operating railroad.

- **Admin. Correction** – A correction to data that is currently contained in the Crossing Inventory. This box should be checked for corrections of data previously submitted in error. (This box should not be checked to report a previously unreported crossing.)

- **Quiet Zone Update** – Any change to the quiet zone status for that crossing. Note: This box is reserved for FRA use only.

Depending on the reporting agency, only certain values apply. New Crossing, No Traffic, Re-Open, and Change in Primary Operating RR are limited to railroads. Closed, Change in Data, Date Change Only, and Admin. Correction may apply to all reporting entities. As noted above, Quiet Zone Update will only apply to FRA use (Part I, Box 25).

## D. DOT Crossing Inventory Number

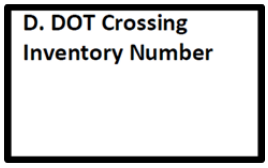



**Figure 2-5: U.S. DOT-FRA Crossing Inventory Form Heading, Item D**

Enter a valid Inventory Number (6-digits followed by an alpha character). Please refer to Appendix A for an explanation about how to obtain Inventory Numbers for new and previously unreported crossings.

For new or previously unreported crossings, the assignment of an Inventory Number occurs when the number is placed on a completed Inventory Form by the responsible railroad and the completed Inventory Form is submitted for inclusion in the U.S. DOT National Highway-Rail Crossing Inventory. More than one crossing number may be assigned to multiple pathway crossings within a station or yard facility.

Note: Once assigned, the Inventory Number stays with that location forever. If the crossing is eventually closed, the Inventory Number and data at the time of closure remains in the file. If the crossing is reopened at the same location, the same Inventory Number must be used again.

**Inventory Number Assignment:** Only one Inventory Number may be assigned to a crossing even if the individual tracks belong to more than one Railroad Company or track owner.

**Crossing on Multi-lane Roads:** A crossing on a multi-lane roadway shall be reported as a single crossing and there shall only be one Inventory Number assigned even if a railroad track moves diagonally across a highway-highway intersection.

**Crossings on Private Company or Railroad Property:** Where there is more than one crossing in a railroad yard or an area belonging to a private company, a port, or a dock, one Inventory Number may be assigned to include all crossings within the private property limits. In addition, one Inventory Number may be used for multiple pathway crossings contained within a railway station. When one Inventory Number has been

assigned to multiple crossings, the primary operating railroad may determine the best method for selecting latitude and longitude coordinates for the purpose of submitting data to the Crossing Inventory. However, when more than one railroad owns track that leads into a private company, port, or dock area, each railroad will be considered to be a primary operating railroad and must assign its own Inventory Number to the crossing(s) within the private company.

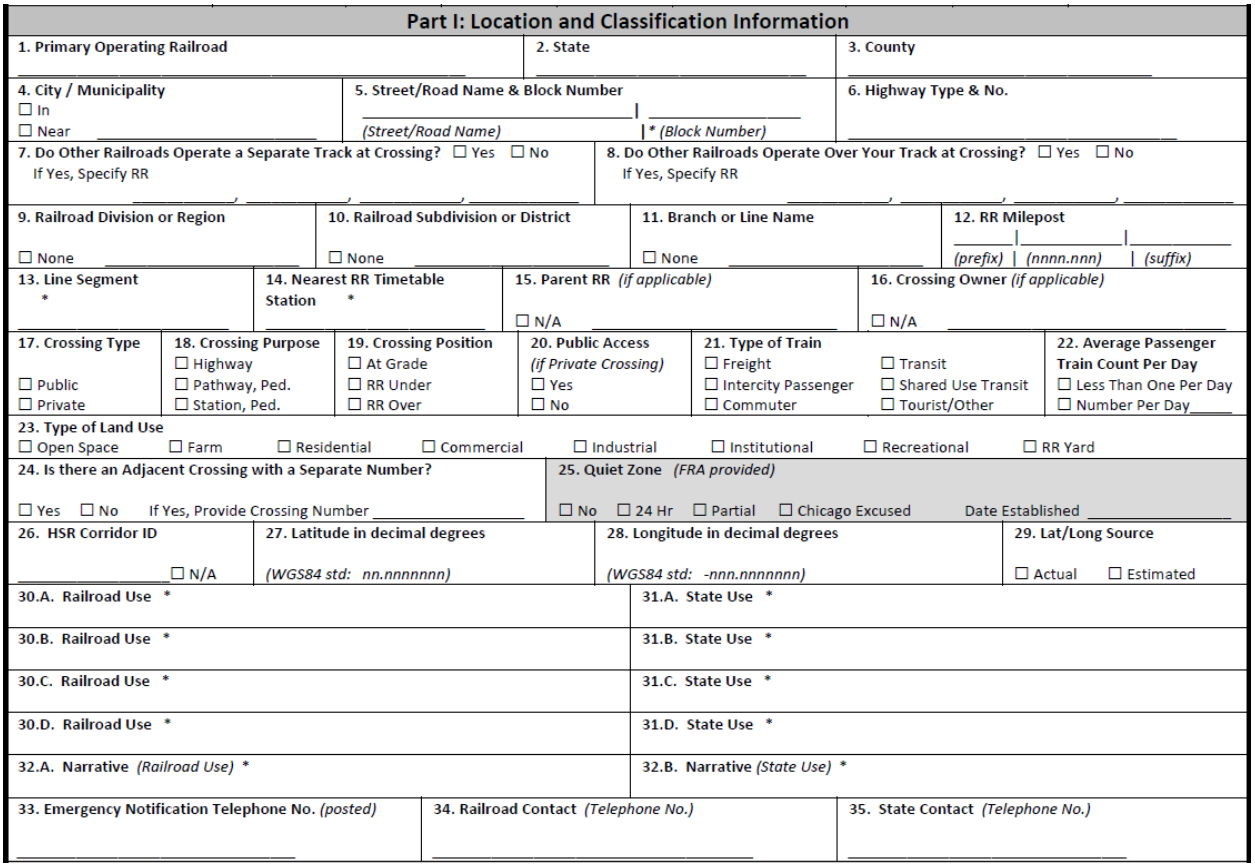
If the railroad would like to extract one or more crossings that have been grouped together under the same Inventory Number, the railroad may request a new Inventory Number for each extracted crossing. However, the original Inventory Number must continue to be assigned to at least one of the crossings that were previously grouped together. In order to maintain a link between the new Inventory Number and the original Inventory Number, the primary operating railroad must also include a note in the "Narrative (Railroad Use)" data field in Part I of the Inventory Form that references the original Inventory Number for each crossing that has been assigned a new Inventory Number.

**Diagonal Crossing through a Highway-Highway Intersection:** When the railroad tracks run diagonally through a highway-highway intersection, thus bisecting the two roadways, only one Crossing Inventory Number is to be assigned and the names of both roadways are to be identified in the Street/Road Name data field.

**Highway Bridge Grade-Separated Crossings:** When roadways have highway bridge structures that are grade-separated crossings (usually two separate bridges each used for highway traffic in opposite directions), assign one number to each structure if the bridge structures are separated by 100 feet or more. If the bridge structures are less than 100 feet apart, one or two numbers may be assigned in accordance with State policy. Assign only one Crossing Inventory Number for bridge structures that are connected or considered to be one structure for both directions of highway traffic.

**Conversion of an At-Grade Crossing to a Grade-Separated Crossing:** When an at-grade crossing is replaced with a grade separation, the at-grade crossing shall be closed and a new crossing inventory number assigned to the grade separation. In the Narrative, it is advisable to indicate something like "replaces at-grade crossing with DOT Number ######X."

# 2. Part I – Location and Classification Information



**Part I: Location and Classification Information**

| | | |
|---|---|---|
| 1. Primary Operating Railroad | 2. State | 3. County |
| 4. City / Municipality ☐ In ☐ Near | 5. Street/Road Name & Block Number (Street/Road Name) \| * (Block Number) | 6. Highway Type & No. |
| 7. Do Other Railroads Operate a Separate Track at Crossing? ☐ Yes ☐ No If Yes, Specify RR | 8. Do Other Railroads Operate Over Your Track at Crossing? ☐ Yes ☐ No If Yes, Specify RR | |
| 9. Railroad Division or Region ☐ None | 10. Railroad Subdivision or District ☐ None | 11. Branch or Line Name ☐ None |
| 12. RR Milepost (prefix) \| (nnnn.nnn) \| (suffix) | | |
| 13. Line Segment * | 14. Nearest RR Timetable Station * | 15. Parent RR *(if applicable)* ☐ N/A |
| 16. Crossing Owner *(if applicable)* ☐ N/A | | |

| | | | | | |
|---|---|---|---|---|---|
| 17. Crossing Type ☐ Public ☐ Private | 18. Crossing Purpose ☐ Highway ☐ Pathway, Ped. ☐ Station, Ped. | 19. Crossing Position ☐ At Grade ☐ RR Under ☐ RR Over | 20. Public Access *(if Private Crossing)* ☐ Yes ☐ No | 21. Type of Train ☐ Freight ☐ Intercity Passenger ☐ Commuter ☐ Transit ☐ Shared Use Transit ☐ Tourist/Other | 22. Average Passenger Train Count Per Day ☐ Less Than One Per Day ☐ Number Per Day |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 23. Type of Land Use ☐ Open Space | ☐ Farm | ☐ Residential | ☐ Commercial | ☐ Industrial | ☐ Institutional | ☐ Recreational | ☐ RR Yard |

| | |
|---|---|
| 24. Is there an Adjacent Crossing with a Separate Number? ☐ Yes ☐ No If Yes, Provide Crossing Number | 25. Quiet Zone *(FRA provided)* ☐ No ☐ 24 Hr ☐ Partial ☐ Chicago Excused Date Established |

| | | | |
|---|---|---|---|
| 26. HSR Corridor ID ☐ N/A | 27. Latitude in decimal degrees *(WGS84 std: nn.nnnnnnn)* | 28. Longitude in decimal degrees *(WGS84 std: -nnn.nnnnnnn)* | 29. Lat/Long Source ☐ Actual ☐ Estimated |

| | |
|---|---|
| 30.A. Railroad Use * | 31.A. State Use * |
| 30.B. Railroad Use * | 31.B. State Use * |
| 30.C. Railroad Use * | 31.C. State Use * |
| 30.D. Railroad Use * | 31.D. State Use * |
| 32.A. Narrative *(Railroad Use)* * | 32.B. Narrative *(State Use)* * |

| | | |
|---|---|---|
| 33. Emergency Notification Telephone No. *(posted)* | 34. Railroad Contact *(Telephone No.)* | 35. State Contact *(Telephone No.)* |

**Figure 2-6: U.S. DOT-FRA Crossing Inventory Form Part I, Location and Classification Information**

## 1. Primary Operating Railroad

1. Primary Operating Railroad

**Figure 2-7: U.S. DOT-FRA Crossing Inventory Form Part I, Item 1**

Enter the valid, railroad code (up to four letters) for the “Primary Operating Railroad” company.

The primary operating railroad may or may not own and maintain the roadbed, tracks, and signal system controlling the crossing. If the primary operating railroad company is not the owner of the track, enter the owner's name in Item 16, “Crossing Owner.”

However, an operating railroad that contracts out its train operations, such as some commuter railroads, should identify itself as the primary operating railroad, if the operating railroad qualifies for primary operating railroad status. The contract railroad operator should not be identified as the primary operating railroad.

Entities who are not subject to the reporting and updating requirements contained in Title 49 Code of Federal Regulations (CFR) Part 234, Subpart F, such as plant railroads and urban rapid transit operators who do not operate through highway-rail or pathway crossings located on track shared with general system railroads or crossings located within a common right-of-way or corridor with a general system railroad, are invited to submit crossing data to the Crossing Inventory on a voluntary basis. For this limited purpose, any railroad-related entity that submits crossing data to the Crossing Inventory should identify itself as the primary operating railroad when submitting crossing data to the Crossing Inventory.

Where multiple railroads or urban rapid transit operators operate trains on separate tracks through the same crossing, each railroad or urban rapid transit operator must submit crossing data to the Crossing Inventory (see Part I, Item 7 below), and each must place its name in the field titled “Primary Operating Railroad” (this links each railroad to the data it has submitted).

Note: FRA assigns valid railroad codes. If the valid railroad or company code is not known, the initiator should contact FRA to obtain the correct code, or to have a new code assigned for a new railroad or company. In the latter case, the complete railroad company name, address, telephone number, and a contact person are required. To contact FRA about railroad or company codes, send an email to: FRARailCodes@dot.gov.

## 2. State

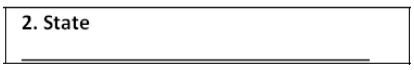



**Figure 2-8: U.S. DOT-FRA Crossing Inventory Form Part I, Item 2**

Enter the two-character U.S. Postal Service (USPS) abbreviation for the State where the crossing is located.

If the crossing is on a State boundary so that parts of the crossing lie in two or more States, the agreement must be made between the two States as to which will claim the crossing for inventory record purposes and that State’s abbreviation must be shown. When a crossing is located on a State line, it is suggested that the crossing be inventoried by, and shown as in, the State that is geographically south or east of the

crossing. FRA suggests that when a crossing lies on the border of a State that this be noted in the appropriate comment boxes at the end of Part I, giving the name of the other entity.

## 3. County


**Figure 2-9: U.S. DOT-FRA Crossing Inventory Form Part I, Item 3**

Enter the name of the county (or parish) where the crossing is located. The county must be in the State identified in Part I, Item 2.

If the crossing is on a county line so that parts of the crossing lie in two or more counties, a decision must be made to place it in only one county. When a crossing is located on a county line, it is suggested that the crossing be shown as in the county that is geographically south or east of the crossing. FRA suggests that when a crossing lies on the border of a county that this be noted in the appropriate comment boxes at the end of Part I, giving the name of the other entity.

## 4. City/Municipality

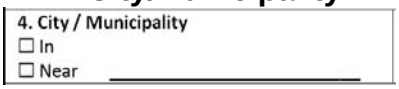



**Figure 2-10: U.S. DOT-FRA Crossing Inventory Form Part I, Item 4**

Enter a check to indicate if the crossing is located "In" or "Near" the specified "City/Municipality."

If the crossing is not within the boundaries of a city, town, or village, enter a check in the box for "Near." If "Near" is checked, enter the name of the city or municipality along the rail line that is closest to the crossing. The city must be in the State identified in Item 2, but it does not have to be in the county identified in Item 3, "County."

If the crossing is located within the boundaries of a city, town, or village, enter a check in the box for "In" and enter the name of the city, town, or village in which the crossing is located. The city must be in the county identified in Part I, Item 3.

If parts of the crossing lie in two or more cities, towns, or villages, identify only one city or municipality. FRA suggests that when a crossing lies on the border of two or more cities, towns, or villages that this be noted in the appropriate comment boxes at the end of Part I, giving the name of the other cities or municipalities.

## 5. Street/Road Name & Block Number

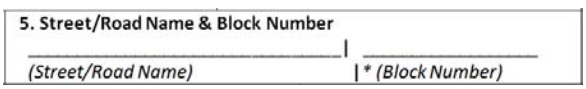



**Figure 2-11: U.S. DOT-FRA Crossing Inventory Form Part I, Item 5**

Enter the street or road name. Street name aliases should not be used.

The block number field is optional. In order to complete this field, enter the block number (up to 6 characters) of the street or road where the crossing is located in the right side of the box. For example, if the closest building has an address of "4285," then the block number is "4200."

For new crossings and future updates, enter the full street name without abbreviations (e.g., N. Canal St. should be North Canal Street, 4th Oak Ave should be Fourth Oak Avenue).

If the roadway is private and it has a name, enter the name of the road or the owner's name. Otherwise, if such information is unknown, enter "private".

When the railroad tracks run diagonally through a highway-highway intersection, thus bisecting the two roadways, only one Inventory Number is to be assigned and the names of both roadways are to be identified in the Street/Road Name data field. Therefore, when entering both roadways in this block, separate with " / ," for example "Elm Street/Main Avenue."

## 6. Highway Type and Number

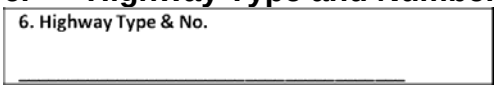



**Figure 2-12: U.S. DOT-FRA Crossing Inventory Form Part I, Item 6**

Enter the type and number of highway or roadway designated by the State, such as Interstate (I), U.S. numbered routes (US), State roadways (SR, ST or SH), county roads (C) or (CR), local city streets (L or LS), local roads (LR), toll roads (TL), State loop/spur (SL), farm to market (FM) etc., and the number, e.g., I-95, US-1, SR-234, C-2096, etc. The number of the highway should be posted on the highway and found on State or county maps. If there is more than one number, enter the most important route, or all the numbers separated by a comma.

## 7. Do Other Railroads Operate a Separate Track at Crossing?

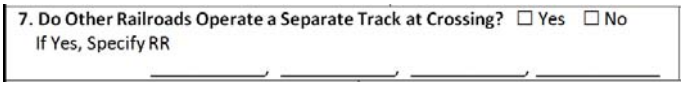



**Figure 2-13: U.S. DOT-FRA Crossing Inventory Form Part I, Item 7**

Enter a check in the appropriate box to indicate if another operating railroad operates over a separate track at the crossing. If "Yes," enter the FRA railroad code for all operating railroads that operate over a separate track within the same pair of warning devices at the crossing. A total of four railroad codes may be entered with up to four

characters each in this field.

**IMPORTANT**– If the "Yes" box is checked and one or more FRA railroad codes have been entered, each individual operating railroad identified must provide the following data to the Crossing Inventory: header information; Part I, Box 1, Boxes 9–12, Box 22; and Part II, Boxes 1–3; and the submission information. The name of the operating railroad submitting the data should be listed in Part I, Box 1, whether or not the individual operating railroad is the primary operating railroad.

The primary operating railroad, in addition to providing the above information, must complete all of the remaining fields on the Inventory Form, in accordance with the Instructions at the top of the Form.

Note: Please refer to Appendix C for a detailed explanation of how each operating railroad is required to submit its own inventory record and future updates.

## 8. Do Other Railroads Operate Over Your Track at Crossing?

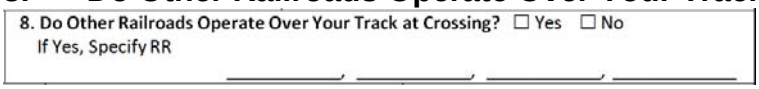



**Figure 2-14: U.S. DOT-FRA Crossing Inventory Form Part I, Item 8**

Enter a check in the appropriate box to indicate if another operating railroad operates over the reporting railroad's track at the crossing. If "Yes," enter the FRA railroad code for all operating railroads that operate trains over the track at the crossing. A total of four railroad codes may be entered with up to four characters each in this field.

## 9. Railroad Division or Region

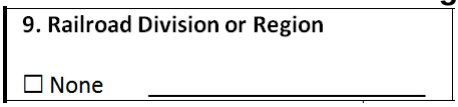



**Figure 2-15: U.S. DOT-FRA Crossing Inventory Form Part I, Item 9**

Enter the name of the division, region, or major district, if the railroad system is divided into such groups. Otherwise, check the "None" box.

## 10. Railroad Subdivision or District

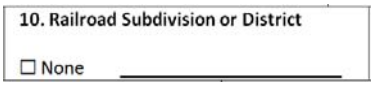



**Figure 2-16: U.S. DOT-FRA Crossing Inventory Form Part I, Item 10**

Enter the name of the subdivision or other classification, if the railroad system is divided into such groups. Otherwise, check the "None" box.

## 11. Branch or Line Name

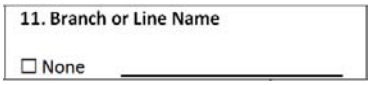



**Figure 2-17: U.S. DOT-FRA Crossing Inventory Form Part I, Item 11**

Enter the name of the branch or line used by the railroad to describe this segment of track. For example, if the track is an industry lead, industry spur, yard lead, or wye, enter the name of the track or the name of the industry. If the branch or line does not have a specific name, then check the "None" box .

## 12. RR Milepost

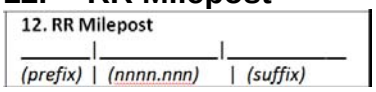



**Figure 2-18: U.S. DOT-FRA Crossing Inventory Form Part I, Item 12**

Enter the railroad milepost number in miles and thousandths of miles (5.3 feet is approximately 1/1000 mile). Enter the number with the decimal point in the following format: (nnnn.nnn). If this accuracy is not attainable, then enter the milepost in miles and hundredths of miles (53 feet is approximately 1/100 mile). Enter the prefix or suffix identified with the milepost if it has one or both.

## 13. Line Segment ID

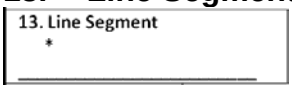



**Figure 2-19: U.S. DOT-FRA Crossing Inventory Form Part I, Item 13**

Enter the railroad identification number for the line segments if the railroad has such a system. If the crossing has an identification number other than the DOT number, such as a State agency number (e.g., a Public Utility Commission (PUC) assigned number), that number may be entered here or in one of the "State Use" fields (Items 31. A–D). This field is optional.

## 14. Nearest RR Timetable Station

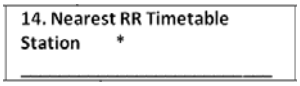



**Figure 2-20: U.S. DOT-FRA Crossing Inventory Form Part I, Item 14**

Enter the name of the nearest timetable station for the primary operating railroad company. This field is optional.

## 15. Parent RR

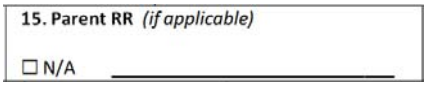


**Figure 2-21: U.S. DOT-FRA Crossing Inventory Form Part I, Item 15**

If applicable, enter the code for the parent railroad or the company that is parent to the operating railroad entered in Part I, Item 1, "Primary Operating Railroad." The entry must be a valid railroad or company code, which can be obtained from FRA. Otherwise, check the "N/A" box.

## 16. Crossing Owner

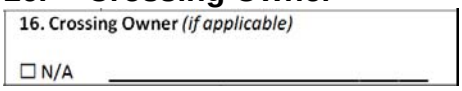



**Figure 2-22: U.S. DOT-FRA Crossing Inventory Form Part I, Item 16**

If applicable, enter the code for the crossing owner (maximum of four characters) of the entity that actually owns the property. The entry must be a valid railroad, company, or agency code. If unknown, it can be obtained from FRA. Otherwise, check the "N/A" box.

## 17. Crossing Type

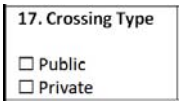



**Figure 2-23: U.S. DOT-FRA Crossing Inventory Form Part I, Item 17**

Check the "Public" box if:

- The crossing is located where a public highway, road, or street crosses one or more railroad tracks either at grade or grade-separated.
- The crossing is a public pathway explicitly authorized by a public authority that is dedicated for the use of non-vehicular traffic, including pedestrians, bicyclists, and others, which is not associated with a public highway, road, or street.
- The crossing is a pathway explicitly authorized by a public authority or a railroad carrier that is dedicated for the use of non-vehicular traffic and is located within a railway station.

Check the "Private" box if:

- The crossing is a location where a private roadway crosses one or more railroad tracks either at grade or grade-separated.
- The crossing is a private pathway, either at grade or grade-separated, explicitly authorized by a railroad carrier that is dedicated for the use of non-vehicular

traffic, including pedestrians, bicyclists, and others, which is not associated with a private roadway.

If Crossing Type is changed from “Private” to “Public” for a highway-rail grade crossing, the entire Inventory Form (or its electronic equivalent) must be completed.

## 18. Crossing Purpose

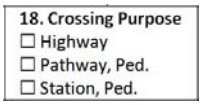



**Figure 2-24: U.S. DOT-FRA Crossing Inventory Form Part I, Item 18**

If the crossing is primarily intended for highway users, including crossings equipped with vehicular and pedestrian warning devices, check the “Highway” box.

If the crossing is a pathway crossing not within a passenger station, check the “Pathway, Ped.” box. A pathway crossing is: 1) explicitly authorized by a public authority or a railroad, 2) dedicated for the use of non-vehicular traffic, including pedestrians, bicyclists, and others, and 3) not associated with a public or private highway, road, or street.

If the crossing is a pathway crossing located within a passenger station, check the “Station, Ped.” box.

## 19. Crossing Position

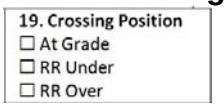



**Figure 2-25: U.S. DOT-FRA Crossing Inventory Form Part I, Item 19**

If the crossing is at the same level as the road or pathway, check the “At Grade” box. If the railroad passes under the roadway or pathway, check the “RR Under” box. If the railroad passes over the roadway or pathway, check the “RR Over” box.

## 20. Public Access at Private Crossing

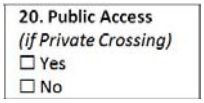



**Figure 2-26: U.S. DOT-FRA Crossing Inventory Form Part I, Item 20**

Public access means that the crossing is a location where the railroad tracks intersect with a private toll road or privately owned road or pathway where the public is allowed to travel without access restrictions. Examples of such locations include, but are not limited to, shopping centers, fairgrounds, parks, schools, residential housing

developments (of at least five dwellings), libraries, hospitals, clinics, airports, bus terminals, beaches, piers, boat launching ramps, and recreational areas.

Enter a checkmark in the box to indicate "Yes" if there is public access at the private crossing or "No" if there is not. There should be no entry made if the crossing is public.

## 21. Type of Train

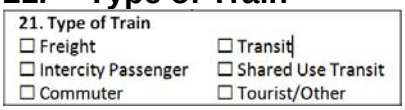



**Figure 2-27: U.S. DOT-FRA Crossing Inventory Form Part I, Item 21**

Check each box that describes the type of rail service that uses the crossing. Check all that apply. The types included are:

- **Freight**
- **Intercity Passenger**
- **Commuter** – a local or regional rail system providing passenger service mostly during the morning and evening peak periods on the general rail system.
- **Transit** – a local rail system providing passenger service within an urban area that is not connected to the general railroad system of transportation.
- **Shared Use Transit** – a local rail system providing passenger service and having some connection to the general railroad system of transportation. This category includes urban rapid transit operations through highway-rail or pathway crossings located on the same track used by railroads that operate on the general railroad system of transportation (e.g., temporal separation or simultaneous joint use). This category also includes urban rapid transit operations through highway-rail or pathway crossings that are located within a shared right-of way or corridor, and share the same crossing warning devices, with a railroad which operates on the general railroad system of transportation.
- **Tourist/Other** – tourist, scenic, historic, or excursion operations that carry passengers with the conveyance of the passengers to a particular destination not being the principal purpose

## 22. Average Passenger Train Count Per Day

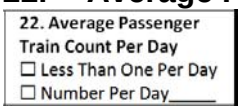



**Figure 2-28: U.S. DOT-FRA Crossing Inventory Form Part I, Item 22**

Enter the average number of total passenger trains using this crossing, per day, on a typical operating day. Intercity passenger, commuter, and urban rapid transit operations, are all included in determining the average number for this field. The value may not exceed the sum of the total train count in Part II, Item 1, "Estimated Number of Daily Train Movements." If the average passenger train count is less than one per day (for example, "three per week") check the "Less than one per day" box. If "Freight" is the only type of train service that is checked in Part I, Item 21, "Type of Train Service," then the average passenger train count per day must be 0.

## 23. Type of Land Use

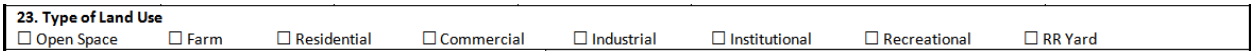



**Figure 2-29: U.S. DOT-FRA Crossing Inventory Form Part I, Item 23**

Check the box that best describes the predominant type of land development in the vicinity (a distance of up to 1,000 feet) of the crossing based on the following categories:

- "Open Space" – area that is sparsely or undeveloped, lightly populated.
- "Farm" – agricultural area, including wineries and other types of nontraditional agricultural enterprises.
- "Residential" – built-up residential area.
- "Commercial" – area with retail stores and businesses, offices, and personal service buildings.
- "Industrial" – area for manufacturing, construction, heavy products, factories, and warehouses.
- "Institutional" – e.g., schools, churches, hospitals, military, educational, religious, health.
- "Recreational" – e.g., Playgrounds, parks, or swim or golf clubs.
- "RR Yard" – area used exclusively for railroad activity such as switching railcars.

## 24. Is there an Adjacent Crossing with a Separate Number?

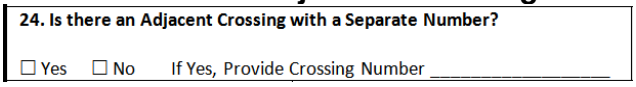



**Figure 2-30: U.S. DOT-FRA Crossing Inventory Form Part I, Item 24**

Enter a check in the "Yes" box to indicate that there is an adjacent crossing with a separate number. If there is, enter the valid crossing number. If there is not an adjacent crossing, then enter a check in the "No" box. Adjacent Crossings are grade crossings with separate Crossing Inventory Numbers, with their own separate warning devices, on

the same vehicular highway or pathway, where the distance between the inside rail of each crossing, as measured along the highway, does not exceed 100 feet.

## 25. Quiet Zone

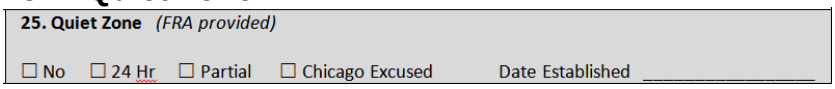



**Figure 2-31: U.S. DOT-FRA Crossing Inventory Form Part I, Item 25**

Leave this field blank because FRA will populate this field with information from Notices of Quiet Zone Establishment that have been received. This item will indicate whether a quiet zone is in effect for the crossing. If a quiet zone is in effect, this item will indicate if it is for 24 hours per day or only a partial day (usually 10 p.m. to 7 a.m.)

If the crossing is not located in a Quiet Zone, the "No" box will be checked. If it is located in a 24-hour quiet zone, the "24 hr" box will be checked. If it is located in a partial quiet zone, the "Partial" box will be checked. If it is in a Chicago-excused area (those crossings in the Chicago area that are currently excused from the Train Horn Rule), the "Chicago Excused" box will be checked. The effective date that was provided in the Notice of Establishment will be the "Date Established." (Note: "Chicago Excused" crossings will not have an entry in the "Date Established").

## 26. HSR Corridor ID

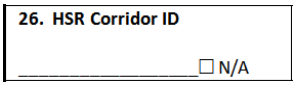



**Figure 2-32: U.S. DOT-FRA Crossing Inventory Form Part I, Item 26**

If this is a high-speed rail (HSR) crossing, enter the four-character "HSR Corridor ID" as defined in Appendix F to this manual.

Note: This field is used to identify the "Section 1010" or "Section 1103" HSR corridor on which the crossing is located. If the crossing is located on such a corridor, enter the "HSR Corridor ID," a four character code (ABC#) as defined in Appendix F to this manual. The corridor may be divided into logical sections by including a numeric number (1–9) for the "#" character. If a numeric number is not used, replace "#" with "X." FRA will assign an HSR Corridor ID for any corridor, or portion thereof that is not currently defined in the Appendix. If "HSR Corridor ID" is not applicable, then check the N/A box.

## 27. Latitude

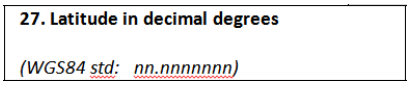



**Figure 2-33: U.S. DOT-FRA Crossing Inventory Form Part I, Item 27**

Enter the latitudinal coordinate as measured at the center of the crossing. This field, along with "Longitude," is used to identify the crossing location using a standardized Global Positioning System (GPS) location point. The "Latitude" must be entered in decimal form as (nn.nnnnnnn), with at least five digits to the right of the decimal point (which is accurate to 4 feet). We will accept up to seven places to the right of the decimal point.

Actual latitude measurements can be obtained either with a GPS device at the crossing location or by using an Internet mapping program, such as Google Maps or Bing Maps. To find latitude and longitude on Google Maps, zoom in on the location of the crossing, right click on the crossing, and select "What's Here?" The coordinates will appear in the search bar above the map, with the latitude measurement listed first. In Bing Maps, right click on the crossing and select the gray box that either says "location" or identifies the closest street address. The coordinates will appear under the address to the left of the map, with the latitude listed first.

To convert latitude values from degrees, minutes, and seconds to decimal form:

Latitude in decimal format = degrees + (minutes divided by 60) + (seconds divided by 3,600).

Latitude coordinate ranges within the continental United States are from 24 to 49 degrees. Alaska latitude values range from 50 to 71 degrees.

Note: The FRA Office of Railroad Safety uses the World Geodetic System 1984 (WGS-84) datum standard. (A datum is the measurement [shape] of the earth's ellipsoid.)

## 28. Longitude

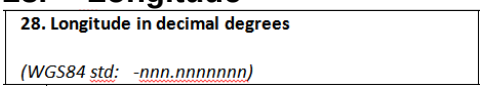



**Figure 2-34: U.S. DOT-FRA Crossing Inventory Form Part I, Item 28**

Enter the longitudinal coordinate as measured at the center of the crossing. This field, along with "Latitude," is used to identify the crossing location using a standardized GPS location point. The "Longitude" must be entered in decimal form as (-nnn.nnnnnnn), with at least five digits to the right of the decimal point (which is accurate to 4 feet). FRA will accept up to seven places to the right of the decimal point.

Actual longitude measurements can be obtained either with a GPS device at the crossing location, or by using an Internet mapping program, such as Google Maps or Bing Maps. To find latitude and longitude on Google Maps, zoom in on the location of the crossing, right click on the crossing and select "What's Here?" The coordinates will appear in the search bar above the map, with the longitude measurement listed second. In Bing Maps, right click on the crossing and select the gray box that either says

"location" or identifies the closest street address. The coordinates will appear under the address to the left of the map, with the longitude listed second.

To convert longitude values from degrees, minutes, and seconds to decimal form:

Longitude in decimal format = degrees + (minutes divided by 60) + (seconds divided by 3,600).

Longitude coordinate ranges within the continental United States are from -66 to -124 degrees. Alaska longitude values range from -165 to -132 degrees.

Note: The FRA Office of Railroad Safety uses the WGS-84 datum standard.

## 29. Lat/Long Source

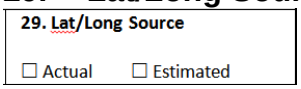



**Figure 2-35: U.S. DOT-FRA Crossing Inventory Form Part I, Item 29**

Enter a check in the appropriate box to indicate the source, "Actual" or "Estimated," for the latitude and longitude coordinate values being provided.

Actual values are those where GPS measurements are taken at the crossing or determined by a positive identification method. Latitude and longitude values, in general, should be taken in the field at the intersection of the centerline of the roadway or pathway with the centerline of the railroad tracks with a horizontal accuracy of 1 meter or better. Mapping software, such as Google or Bing maps, may be used to obtain "Actual" values.

Otherwise, the values are indicated as "Estimated." Any values provided after March 7, 2015 must be actual values.

## 30. Railroad Use

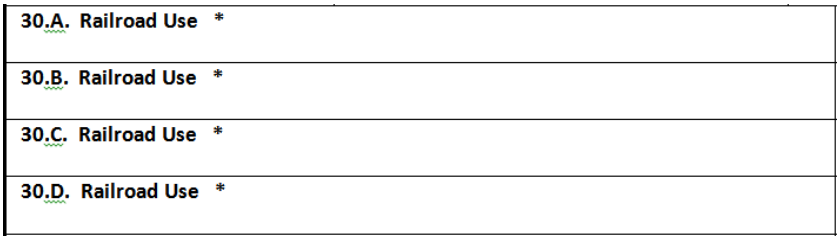



**Figure 2-36: U.S. DOT-FRA Crossing Inventory Form Part I, Item 30**

Only the railroad may enter any text or data of its choice in these fields. For example, the railroad may note whether monitoring is being conducted at a passive crossing. No editing will be performed on these fields. These fields are optional.

## 31. State Use

| |
|---|
| 31.A. State Use * |
| 31.B. State Use * |
| 31.C. State Use * |
| 31.D. State Use * |

**Figure 2-37: U.S. DOT-FRA Crossing Inventory Form Part I, Item 31**

Only the State may enter any text or data of its choice in these fields. For example, the State may note whether monitoring is being conducted at a passive crossing. No editing will be performed on these fields. If a State has a separate PUC number for a crossing, the State may wish to use one of these fields for this purpose. (For those States that have used the "RR ID" field for this in the past, FRA will move that data to Item 31.A. if requested.) These fields are optional.

## 32.A. Narrative *(Railroad Use)*

32.A. Narrative *(Railroad Use)* *

**Figure 2-38: U.S. DOT-FRA Crossing Inventory Form Part I, Item 32.A.**

Enter any narrative comments desired in this field. Only the railroad may use this field and no editing will be performed on this field. This field is optional.

## 32.B. Narrative *(State Use)*

32.B. Narrative *(State Use)* *

**Figure 2-39: U.S. DOT-FRA Crossing Inventory Form Part I, Item 32.B.**

Enter any narrative comments desired in this field. Only the State may use this field and no editing will be performed on this field. This field is optional.

## 33. Emergency Notification Telephone No. *(posted)*

33. Emergency Notification Telephone No. *(posted)*

**Figure 2-40: U.S. DOT-FRA Crossing Inventory Form Part I, Item 33**

Enter the telephone number (area code and phone number using only numeric values) for the Emergency Notification System (ENS) contact (e.g., usually railroad police, dispatch center, or other railroad emergency contact) associated with the crossing. This will be the ENS telephone number used by the railroad, posted at the crossing, and publicized for the reporting of emergencies, malfunctions, and problems at crossings, in accordance with Subpart E to 49 CFR Part 234. Please note that "911" cannot be used as the "Emergency Notification Telephone No."

## 34. Railroad Contact *(Telephone No.)*

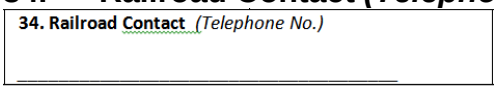



**Figure 2-41: U.S. DOT-FRA Crossing Inventory Form Part I, Item 34**

Enter the telephone number (area code and phone number using only numeric values) of the primary operating railroad's point of contact for data associated with the crossing.

## 35. State Contact *(Telephone No.)*

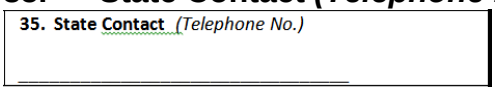



**Figure 2-42: U.S. DOT-FRA Crossing Inventory Form Part I, Item 35**

Enter the telephone number (area code and phone number using only numeric values) of the State highway contact associated with the crossing. This would normally be the State inventory contact or the State DOT engineering contact (such as the Section 130 State Contact) responsible for crossing improvement projects.

# 3. Part II – Railroad Information

| Part II: Railroad Information | | | | |
|---|---|---|---|---|
| 1. Estimated Number of Daily Train Movements | | | | |
| 1.A. Total Day Thru Trains *(6 AM to 6 PM)* _____ | 1.B. Total Night Thru Trains *(6 PM to 6 AM)* _____ | 1.C. Total Switching Trains _____ | 1.D. Total Transit Trains _____ | 1.E. Check if Less Than One Movement Per Day ☐ How many trains per week? _____ |
| 2. Year of Train Count Data *(YYYY)* _____ | 3. Speed of Train at Crossing<br>3.A. Maximum Timetable Speed *(mph)* _____<br>3.B. Typical Speed Range Over Crossing *(mph)* From _____ to _____ | | | |
| 4. Type and Count of Tracks<br>Main _____ Siding _____ Yard _____ Transit _____ Industry _____ | | | | |
| 5. Train Detection *(Main Track only)*<br>☐ Constant Warning Time ☐ Motion Detection ☐AFO ☐ PTC ☐ DC ☐ Other ☐ None | | | | |
| 6. Is Track Signaled?<br>☐ Yes ☐ No | 7.A. Event Recorder<br>☐ Yes ☐ No | 7.B. Remote Health Monitoring<br>☐ Yes ☐ No | | |

**Figure 2-43: U.S. DOT-FRA Crossing Inventory Form Part II, Railroad Information**

## 1. Estimated Number of Daily Train Movements

| 1. Estimated Number of Daily Train Movements | | | | |
|---|---|---|---|---|
| 1.A. Total Day Thru Trains *(6 AM to 6 PM)* _____ | 1.B. Total Night Thru Trains *(6 PM to 6 AM)* _____ | 1.C. Total Switching Trains _____ | 1.D. Total Transit Trains _____ | 1.E. Check if Less Than One Movement Per Day ☐ How many trains per week? _____ |

**Figure 2-44: U.S. DOT-FRA Crossing Inventory Form Part II, Items 1.A.-1.E.**

**Note: In the event that there is a significant change in data, FRA recommends that these fields be updated at that time rather than waiting for the next required 3-year periodic update.**

**Important: The primary operating railroad must report the data for Items 1–3 in Part II for all railroads that are operating through the crossing unless multiple railroads or urban rapid transit operators operate trains on separate tracks through the same crossing as indicated in Part I.7. If this is the case, then each railroad or urban rapid transit operator must report the data for Items 1–3 in Part II.**

### 1.A. Total Day Thru Trains *(6 AM to 6 PM)*

Enter the total number of through (thru) trains that operate through the crossing from 6 am–6 pm per day during normal railroad operating periods. Thru trains are trains whose primary responsibility is to operate over a route with defined beginning and end points. Local freight thru train movements and passenger and commuter rail train movements are considered to be thru train movements for purposes of the Crossing Inventory.

### 1.B. Total Night Thru Trains *(6 PM to 6AM)*

Enter the total number of thru trains that operate through the crossing from 6 pm–6 am per day during normal railroad operating periods. Thru trains are trains whose primary responsibility is to operate over a route with defined beginning and end points. Local

freight thru train movements and passenger and commuter rail train movements are considered to be Thru Train movements for purposes of the Crossing Inventory.

### 1.C. Total Switching Trains

Enter the total number switching train movements through the crossing per day. "Switching Trains" are those trains whose movements primarily involve the pickup and set-out of cars for various industries and/or rail yards.

Each movement in one direction counts as one train movement. All locals, industrial runs and switch engines would be classified as switching movements. However, do not include such trains when they travel over the crossing like a thru train to get to their destination to perform their switching operations. Those trains are to be considered as thru trains.

### 1.D. Total Transit Trains

Enter the total number of urban rapid transit train movements (either light rail or heavy rail) through the crossing per day during normal railroad operating periods. If a railroad does not operate urban rapid transit train movements through the crossing then that railroad should enter zero. Note: commuter train operations that are regulated by FRA are not considered to be urban rapid transit train movements.

### 1.E. Check if Less Than One Movement Per Day

Check the check box if this crossing averages less than one train movement per day. Enter a count or estimate of the number of trains using this crossing per *week.* If the operation is seasonal in nature (e.g., fall foliage excursion train), enter an estimated count of the number of trains using this crossing per week during the normal operating season. Note: If the sum of train counts for 1.A through 1.D is greater than 0, the box should not be checked.

### 2. Year of Train Count Data

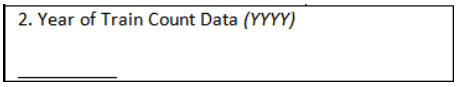



**Figure 2-45: U.S. DOT-FRA Crossing Inventory Form Part II, Item 2**

**Note: In the event that there is a significant change in data, FRA recommends that this field be updated at that time rather than waiting for the next required 3-year periodic update.**

Enter the year that the train count data was **collected** or last **verified**. If any train count data changes, the data field must be updated at time of submission.

## 3. Speed Of Train At Crossing

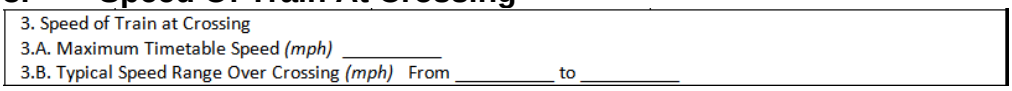



**Figure 2-46: U.S. DOT-FRA Crossing Inventory Form Part II, Items 3.A. – 3.B.**

**Note: In the event that there is a significant change in data, FRA recommends that this item be updated at that time rather than waiting for the next required 3-year periodic update.**

### 3.A. Maximum Timetable Speed (mph)

Enter the highest maximum timetable speed in miles per hour for any type of train movement over the crossing. If there are both freight and passenger train movements over the crossing, enter the highest maximum authorized speed (which will generally be the maximum authorized speed for passenger train movements). Permanent timetable speed restrictions should be entered, if applicable. This field must be greater than or equal to the maximum value in Item 3B, *Typical Speed Range Over Crossing*.

### 3.B. Typical Speed Range Over Crossing (mph)

Enter the typical minimum speed ("from") through the crossing in miles per hour (mph). (This should be the typical minimum speed for normal operations through the crossing, not the minimum speed possible.) Enter the typical maximum speed ("to") through the crossing. Neither value can be greater than the maximum timetable speed in Item 3.A.

## 4. Type and Count of Tracks


**Figure 2-47: U.S. DOT-FRA Crossing Inventory Form Part II, Item 4**

- Enter the number of "Main" line tracks. A mainline track is defined as a track extending through yards or between stations, upon which trains are operated by timetable or train order or both, or the use of which is governed by a signal system.
- Enter the number of "Siding" tracks. A siding track is defined as a track auxiliary to the main track used for meeting or passing trains.
- Enter the number of "Yard" tracks. A yard is defined as a system of tracks within defined limits used for the making up or breaking up of trains, for the storage of cars, and for other purposes over which movements not authorized by timetable or by train order may be made, subject to prescribed signals, rules or other special instructions. Spur track and lead track are included in this definition for purposes of this Inventory Form. Sidings and industry track are not included, nor is mainline track within yard limits.
- Enter the number of "Transit" tracks. A urban rapid transit track is defined as a track, on which a light-rail train, trolley, or streetcar moves passengers from

station to station typically within an urban area (and its suburbs), that is not connected with the general railroad system of transportation.

Enter the number of "Industry" tracks. An industry track is defined as a switching track, or series of tracks, serving the needs of a commercial industry other than a railroad. Note: Enter "0" for each track type specified that is not present at the crossing.

## 5. Train Detection (*Main Track Only*)


**Figure 2-48: U.S. DOT-FRA Crossing Inventory Form Part II, Item 5**

Enter a check to indicate the type of train detection equipment used to activate the warning system at the crossing for movements on the main track(s). More than one checkbox can be selected. If the crossing warning devices are not activated upon the arrival of a train, "None" should be checked.

The types of train detection equipment are:

- Constant Warning Time
- Motion Detection
- DC – Direct Current
- AFO – Audio Frequency Overlay
- PTC – Positive Train Control (please refer to 49 CFR § 236.1005 for a description of Positive Train Control systems)
- Other – for example when signals are activated manually by a watchman, or by means of other technologies
- None

## 6. Is Track Signaled?

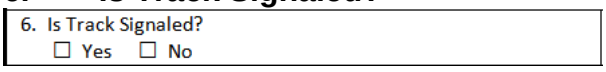



**Figure 2-49: U.S. DOT-FRA Crossing Inventory Form Part II, Item 6**

Enter a check in the appropriate box to indicate whether or not the track is equipped with a block signal, cab signal, or train control system to govern train operations.

## 7. Monitoring Devices

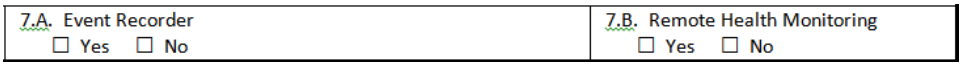



**Figure 2-50: U.S. DOT-FRA Crossing Inventory Form Part II, Items 7.A – 7.B**

Enter a check in the appropriate box to indicate whether an event recorder and/or a remote health monitoring system is installed at the crossing.

These fields are required when the warning devices at the crossing include any of the following: four-quadrant gates, three-quadrant gates, or two-quadrant gates; or flashing lights.

**Event Recorder** means a device designed to resist tampering that monitors and records data on information at the grade crossing location such as (but not limited to) train speed, direction of motion, time, and distance over the most recent timeframe (e.g. last 24 or 48 hours) of the grade crossing warning system operation.

**Remote Health Monitoring** means an electronic system designed to remotely notify the railroad (typically the railroad signal maintainer or a trouble desk) that components of the automatic warning system are not functioning as intended.

# 4. Part III – Highway or Pathway Traffic Control Device Information

**Part III: Highway or Pathway Traffic Control Device Information**

| 1. Are there Signs or Signals? ☐ Yes ☐ No | **2. Types of Passive Traffic Control Devices associated with the Crossing** | | | | |
|---|---|---|---|---|---|
| | 2.A. Crossbuck Assemblies *(count)* | 2.B. STOP Signs *(R1-1)* *(count)* | 2.C. YIELD Signs *(R1-2)* *(count)* | 2.D. Advance Warning Signs *(Check all that apply; include count)* ☐ None<br>☐ W10-1 _____ ☐ W10-3 _____ ☐ W10-11 _____<br>☐ W10-2 _____ ☐ W10-4 _____ ☐ W10-12 _____ | |

| 2.E. Low Ground Clearance Sign *(W10-5)* ☐ Yes *(count_____)* ☐ No | 2.F. Pavement Markings ☐ Stop Lines ☐Dynamic Envelope ☐ RR Xing Symbols ☐ None | 2.G. Channelization Devices/Medians ☐ All Approaches ☐ Median ☐ One Approach ☐ None | 2.H. EXEMPT Sign *(R15-3)* ☐ Yes ☐ No | 2.I. ENS Sign *(I-13)* Displayed ☐ Yes ☐ No |
|---|---|---|---|---|

| 2.J. Other MUTCD Signs ☐ Yes ☐ No<br>Specify Type _____ Count _____<br>Specify Type _____ Count _____<br>Specify Type _____ Count _____ | 2.K. Private Crossing Signs *(if private)* ☐ Yes ☐ No | 2.L. LED Enhanced Signs *(List types)* |
|---|---|---|

**3. Types of Train Activated Warning Devices at the Grade Crossing *(specify count of each device for all that apply)***

| 3.A. Gate Arms *(count)* Roadway _____ Pedestrian _____ | 3.B. Gate Configuration ☐ 2 Quad ☐ 3 Quad ☐ 4 Quad ☐ Full *(Barrier)* Resistance ☐ Median Gates | 3.C. Cantilevered *(or Bridged)* Flashing Light Structures *(count)* Over Traffic Lane _____ ☐ Incandescent Not Over Traffic Lane _____ ☐ LED | 3.D. Mast Mounted Flashing Lights *(count of masts)* _____ ☐ Incandescent ☐ LED ☐ Back Lights Included ☐ Side Lights Included | 3.E. Total Count of Flashing Light Pairs |
|---|---|---|---|---|

| 3.F. Installation Date of Current Active Warning Devices: *(MM/YYYY)* _____/_____ ☐ Not Required | 3.G. Wayside Horn ☐ Yes Installed on *(MM/YYYY)* _____/_____ ☐ No | 3.H. Highway Traffic Signals Controlling Crossing ☐ Yes ☐ No | 3.I. Bells *(count)* |
|---|---|---|---|

| 3.J. Non-Train Active Warning ☐ Flagging/Flagman ☐Manually Operated Signals ☐ Watchman ☐ Floodlighting ☐ None | 3.K. Other Flashing Lights or Warning Devices Count _____ Specify type _____ |
|---|---|

| 4.A. Does nearby Hwy Intersection have Traffic Signals? ☐ Yes ☐ No | 4.B. Hwy Traffic Signal Interconnection ☐ Not Interconnected ☐ For Traffic Signals ☐ For Warning Signs | 4.C. Hwy Traffic Signal Preemption ☐ Simultaneous ☐ Advance | 5. Highway Traffic Pre-Signals ☐ Yes ☐ No Storage Distance * _____ Stop Line Distance * _____ | 6. Highway Monitoring Devices *(Check all that apply)* ☐ Yes - Photo/Video Recording ☐ Yes – Vehicle Presence Detection ☐ None |
|---|---|---|---|---|

**Figure 2-51: U.S. DOT-FRA Crossing Inventory Form Part III, Highway or Pathway Traffic Control Sign and Device Information**

## 1. Are there Signs or Signals?

| 1. Are there Signs or Signals? ☐ Yes ☐ No |
|---|

**Figure 2-52: U.S. DOT-FRA Crossing Inventory Form Part III, Item 1**

Enter a check in the appropriate box to indicate whether signs or signals are installed at the crossing.

## 2. Type of Passive Traffic Control Devices Associated With the Crossing

| **2. Types of Passive Traffic Control Devices associated with the Crossing** | | | |
|---|---|---|---|
| 2.A. Crossbuck Assemblies *(count)* | 2.B. STOP Signs *(R1-1)* *(count)* | 2.C. YIELD Signs *(R1-2)* *(count)* | 2.D. Advance Warning Signs *(Check all that apply; include count)* ☐ None<br>☐ W10-1 _____ ☐ W10-3 _____ ☐ W10-11 _____<br>☐ W10-2 _____ ☐ W10-4 _____ ☐ W10-12 _____ |

**Figure 2-53: U.S. DOT-FRA Crossing Inventory Form Part III, Items 2.A. – 2.D.**

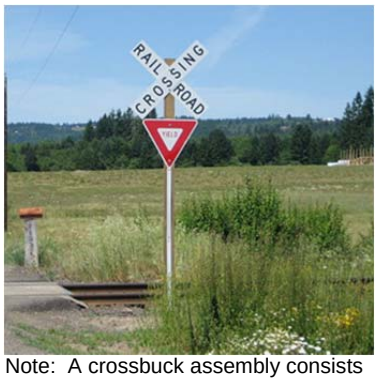
### 2.A. Crossbuck Assemblies

Enter a count of the number of masts or posts with mounted crossbucks, not a count of the number of crossbuck signs. Two or more crossbucks mounted on a single post are

counted as one unit. Include all masts with crossbucks without distinction as to the reflectivity type.

If the crossing has a train-activated warning device (flashing lights [cantilevered or mast mounted] and/or gates), do not count the individual number of crossbucks mounted on these devices.

As a matter of information, FHWA (via the MUTCD) requires that crossbuck assemblies be installed by December 31, 2019, or when adjustments are made to the individual highway-rail grade crossing and/or corridor, whichever comes first.




Note: A crossbuck assembly consists of a crossbuck sign and a "YIELD" sign, unless study indicates a "STOP" sign is necessary.

**Figure 2-54: Example of a Crossbuck Assembly**

### 2.B. STOP Signs (*R1-1*)

Enter the count of posts or masts with stop signs, regardless of any other type of warning devices. If there are two posts securing one sign, count them as one post.

Note: Do not include "STOP" signs from adjacent streets or roadways.

### 2.C. YIELD Signs (*R1-2*)

Enter the count of posts or masts with yield signs (MUTCD R1-2) at this crossing regardless of any other type of warning devices. If there are two posts securing one sign, count them as one post.

Note: Do not include "YIELD" signs from adjacent streets or roadways.

### 2.D. Advance Warning Signs *(Check all that apply; include count)*

Enter a check in the box for each type of advance warning sign at the crossing and enter a count for each type of sign. For each sign that is checked, it must correspond with a count value of "1" or greater. If there are no advance warning signs, check "None."

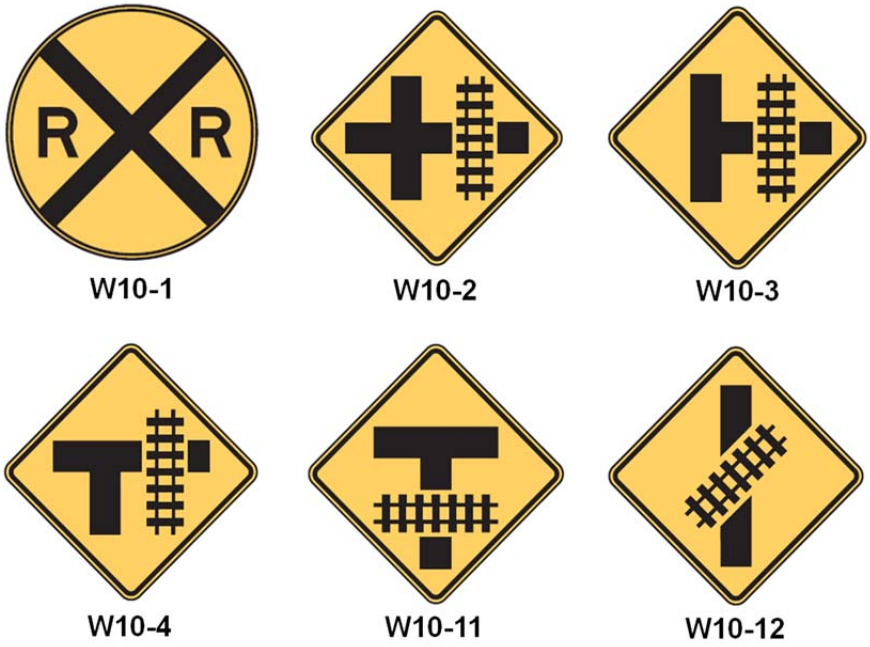



**Figure 2-55: Sample Advance Warning Sign**

## 2.E. Low Ground Clearance Sign (*W10-5*)

2.E. Low Ground Clearance Sign
*(W10-5)*
☐ Yes *(count_____)*
☐ No

**Figure 2-56: U.S. DOT-FRA Crossing Inventory Form Part III, Item 2.E.**

Check the "Yes" box to indicate that low ground clearance signs are present at the crossing. Then, enter the number of signs present. The standard warning sign for low ground clearance crossings is identified in the MUTCD as W10-5. Check "No" box if there are none.

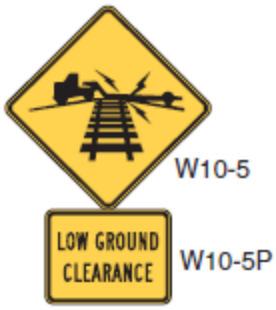



**Figure 2-57: Sample Low Ground Clearance Warning Sign**

## 2.F. Pavement Markings

2.F. Pavement Markings

☐ Stop Lines ☐Dynamic Envelope
☐ RR Xing Symbols ☐ None

**Figure 2-58: U.S. DOT-FRA Crossing Inventory Form Part III, Item 2.F.**

Enter a check in the appropriate box for each type of pavement marking present that conforms to the MUTCD. If there are no stop lines, railroad crossing symbols, or dynamic envelope marking present, check "None."

## 2.G. Channelization Devices/Medians

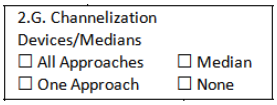



**Figure 2-59: U.S. DOT-FRA Crossing Inventory Form Part III, Item 2.G.**

Check the appropriate box(s) to reflect the location of a channelization or median structure present at the crossing, or check "None" if there are no such devices. If channelization devices are present at the crossing select either "All Approaches" or "One Approach" and leave "Median" blank. If a median is present at the crossing, also select either "All approaches" or "One approach" and select the "Median" box.

"Channelization Devices" mean a traffic separation system made up of a raised longitudinal channelizer, with vertical panels or tubular delineators, that is placed between opposing highway lanes designed to alert or guide traffic around an obstacle or to direct traffic in a particular direction.

"Median" means a non-traversable portion of a divided highway separating the travel ways for traffic in opposite directions.

## 2.H. EXEMPT Sign *(R15-3)*

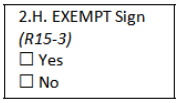



**Figure 2-60: U.S. DOT-FRA Crossing Inventory Form Part III, Item 2.H.**

Check the "Yes" box if there is at least one EXEMPT sign displayed at the crossing and "No" if none are displayed. An exempt crossing is one where drivers of highway vehicles carrying passengers for hire, school buses carrying students, or highway vehicles carrying hazardous materials are not required to stop, except when rail traffic is approaching or occupying the grade crossing or the driver's view is blocked.

## 2.I. ENS Sign Displayed *(I-13)*

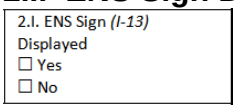



**Figure 2-61: U.S. DOT-FRA Crossing Inventory Form Part III, Item 2.I.**

Check the "Yes" box if there is at least one ENS sign displayed at the crossing, and "No" if none are displayed.

Signs or numbers on nearby signal bungalows are not considered to be ENS signs since the general public may not clearly understand their meaning and are not in compliance with FRA regulations (49 CFR Part 234, Subpart E).

## 2.J. Other MUTCD Signs

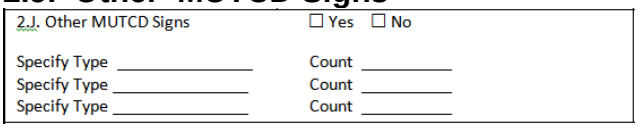



**Figure 2-62: U.S. DOT-FRA Crossing Inventory Form Part III, Item 2.J.**

Check the "Yes" box if there is at least one other MUTCD sign displayed at the crossing and "No" if none are displayed.

Enter the MUTCD type and the count of signs for each MUTCD type installed at the crossing.

Examples:

- Specify Type R15-8 Count 2
- Specify Type W10-9 Count 2

## 2.K. Private Crossing Signs *(if Private)*

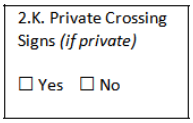



**Figure 2-63: U.S. DOT-FRA Crossing Inventory Form Part III, Item 2.K.**

If the crossing is a private crossing, enter a check in the Yes box if there is a private crossing sign installed. Check the "No" box if there are none. Note: This box should be left blank for public crossings.

## 2.L. LED Enhanced Signs (*List types*)

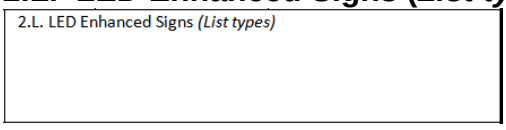



**Figure 2-64: U.S. DOT-FRA Crossing Inventory Form Part III, Item 2.L.**

List the types of light-emitting diode (LED) enhanced signs in use, referencing to the MUTCD coded signs. For example: Crossbuck R15-1.

## 3. Type of Train Activated Warning Devices at the Grade Crossing (*specify count of each device for all that apply*)

| 3. Types of Train Activated Warning Devices at the Grade Crossing *(specify count of each device for all that apply)* | | | | |
|---|---|---|---|---|
| 3.A. Gate Arms *(count)*<br><br>Roadway _____<br>Pedestrian _____ | 3.B. Gate Configuration<br><br>☐ 2 Quad ☐ Full *(Barrier)*<br>☐ 3 Quad Resistance<br>☐ 4 Quad ☐ Median Gates | 3.C. Cantilevered *(or Bridged)* Flashing Light Structures *(count)*<br>Over Traffic Lane _____ ☐ Incandescent<br><br>Not Over Traffic Lane _____ ☐ LED | 3.D. Mast Mounted Flashing Lights *(count of masts)* _____<br>☐ Incandescent ☐ LED<br>☐ Back Lights Included ☐ Side Lights Included | 3.E. Total Count of Flashing Light Pairs |

**Figure 2-65: U.S. DOT-FRA Crossing Inventory Form Part III, Items 3.A. – 3.E.**

### 3.A. Gate Arms (*count*)

Enter the number of Roadway and Pedestrian gates at the crossing. The total count for each type of gate is required. If gates are not present, enter "0".

Note: Pedestrian gate arms are only those that are part of the crossing signaling system that are activated upon train detection.

Do not count:

- Pedestrian swing gates
- Post-mounted flashing light assemblies (3.D.)
- Crossbuck assemblies (2.A.)

### 3.B. Gate Configuration

Check the boxes for each type of gate configuration found at the crossing. A gate (for purposes of the Crossing Inventory) is an automatically operated traffic control device which, when activated into a horizontal position, is intended to physically impede users such that they are discouraged from entering a particular grade crossing. Check only one box on the left side of 3.B. (2 Quad, 3 Quad, or 4 Quad). On the right side, check any applicable box. The choices are:

- **"**2 Quad**"** (two-quadrant gates) – a gate configuration featuring gates only on entrance lanes leading onto the crossing. If a crossing does not have any gates on any exit lanes leading off the crossing, then it is to be considered a "Two quadrant gate" crossing. Note: A gated crossing on a one-way street is to be considered a "2 Quad" gate configuration.

- "3 Quad" (three-quadrant gates) – a specific gate configuration featuring gates on all entrance lanes leading on to the crossing, but with only one exit leading off the crossing that is equipped with a gate.

- "4 Quad" (four-quadrant gates) – a specific gate configuration that features gates on all entrance and all exit lanes at the crossing. When four quadrant gates are activated and fully lowered, all entrance lanes and all exit lanes are blocked by gates.

- "Full (Barrier) Resistance" gates – a gate-like device that is specifically designed to physically prevent a highway vehicle from entering the crossing area when the resistance gate system is fully deployed.

- "Median" gates (sometimes referred to as dual entrance gates) – a supplemental gate installation located on a roadway's median (to the left of the travel lanes) that works in combination with a gate installed on the outside edge of the roadway (to the right of the travel lanes) to jointly provide blockage of multiple lanes on a single roadway approach to the crossing, with both gate arm tips meeting (2-foot maximum gap) in the middle.

  Note: This field is required if the number of gate arms in 3.A. is greater than 0.

**3.C. Cantilevered *(or Bridged)* Flashing Light Structures *(count)***

Enter the count of cantilevered (or bridged) flashing light structures that are: (1) "Over The Traffic Lanes," and (2) "Not Over the Traffic Lanes." Count the number of structures, not the number of flashing light pairs. If cantilevered flashing light structures are not present, enter "0".

Check the appropriate box to indicate whether the flashing lights are Incandescent or LED.

**3.D. Mast-Mounted Flashing Lights *(count of masts)***

Enter the count of masts that have flashing lights. Count the number of masts, not the number of flashing light pairs. The number of cantilevered structures are not included in the count. If mast-mounted flashing lights are not present, enter "0".

Check the appropriate boxes to indicate whether the flashing lights are Incandescent or LED, and whether back lights and side lights are included.

When indicating the presence of mast-mounted flashing lights, do not enter the number of crossbuck assemblies (2.A.) at the crossing.

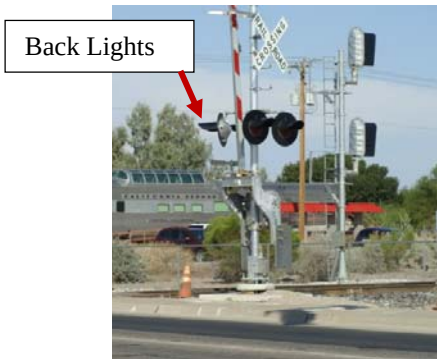



**Figure 2-66: Examples of Back Lights and Side Lights**

## 3.E. Total Count of Flashing Light Pairs

Enter the total number of flashing light pairs installed at the crossing, including back lights, side lights, and where cantilever structures are present


Example of 3 pairs

Example of 4 pairs

**Figure 2-67: Examples of 3 and 4 of flashing light pairs**

## 3.F. Installation Date of Current Active Warning Devices

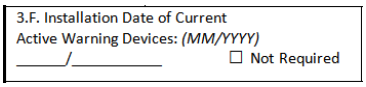

3.F. Installation Date of Current
Active Warning Devices: *(MM/YYYY)*
_____/_____ ☐ Not Required

**Figure 2-68: U.S. DOT-FRA Crossing Inventory Form Part III, Item 3.F.**

This data field must be updated if train-activated warning devices are installed or upgraded at a public highway-rail grade crossing after March 7, 2015. Using the list below, enter the installation date for the first device encountered (moving from top to bottom).

1. Four quad (or full barrier) gates
2. Three quad gates
3. Gates (normally two quadrant)
4. Flashing lights (standard and cantilever type units)
5. Highway traffic signals, wigwags, bells, or other activated devices
6. Special active warning devices (usually flagman)

Check the “Not Required” checkbox if the active warning devices were installed before March 7, 2015 and the installation date is not provided. Completion of this data field is not required for active warning devices installed prior March 7, 2015; however, if date is known, it is recommended to enter it.

## 3.G. Wayside Horn

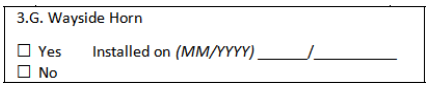



**Figure 2-69: U.S. DOT-FRA Crossing Inventory Form Part III, Item 3.G.**

Check the "Yes" box if the crossing is equipped with a wayside horn and enter the month and year that the horn or system was installed. Check "No" if the crossing is not equipped with a wayside horn.

## 3.H. Highway Traffic Signals Controlling Crossing

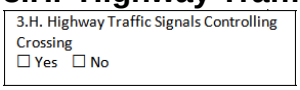



**Figure 2-70: U.S. DOT-FRA Crossing Inventory Form Part III, Item 3.H.**

Enter a check in the "Yes" box to indicate that there are highway traffic signals that control highway traffic over the crossing, exclusive of other types of warning devices. For purposes of Item 3.H., "highway traffic signals" refers only to train-activated red-amber-green signals that control street traffic over the crossing. Do not count highway signals controlling a nearby intersection even if they are interconnected with the crossing warning devices.

Enter a check in the "No" box if there are none.

## 3.I. Bells

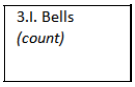



**Figure 2-71: U.S. DOT-FRA Crossing Inventory Form Part III, Item 3.I.**

Enter the count of bells (either mechanical or electrical) present at the crossing as part of the warning system. If there are none, enter "0."

## 3.J. Non-Train Active Warning

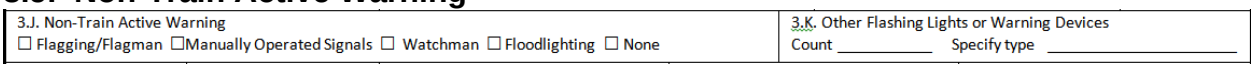



**Figure 2-72: U.S. DOT-FRA Crossing Inventory Form Part III, Items 3.J – 3.K**

Check the appropriate box if there is "Flagging" or a "Flagman" (a member of the train crew or other person who actively controls the flow of vehicular traffic using hand-signaling devices or an Automated Flagger Assistance Device); "Manually Operated Signals" (e.g., dual toned multi-frequency (DTMF)-controlled, push-button activated); "Watchman" (a person assigned to provide warning that is not a member of the train crew); or "Floodlighting" at the crossing. Only floodlighting—which is distinctive from ordinary street lighting in intensity, light distribution, focus, or color—is to be reported. Check "None" if applicable.

## 3.K. Other Flashing Lights or Warning Devices

Enter the count and type of any other special warning devices at the crossing. For example, this would include wigwags if present. If none are present, enter a count of "0".

| 4.A. Does nearby Hwy Intersection have Traffic Signals? | 4.B. Hwy Traffic Signal Interconnection | 4.C. Hwy Traffic Signal Preemption |
|---|---|---|
| ☐ Yes ☐ No | ☐ Not Interconnected<br>☐ For Traffic Signals<br>☐ For Warning Signs | ☐ Simultaneous<br>☐ Advance |

**Figure 2-73: U.S. DOT-FRA Crossing Inventory Form Part III, Items 4.A. – 4.C.**

## 4.A. Does nearby Hwy Intersection have Traffic Signals?

Check either the "Yes" or "No" box to indicate whether or not a highway-highway intersection within 500 feet has highway traffic signals.

Note: The distance (500 feet or less) is measured from the nearest rail, not from the centerline of track.

## 4.B. Hwy Traffic Signal Interconnection

Check all that apply. If "Not Interconnected" is checked, do not check the other two choices.

- "Not Interconnected" – crossings equipped with active warning systems that do not have an electrical connection between the railroad active warning system and the traffic signal controller assembly for the purpose of preemption.
- "For Traffic Signals" – crossings having an electrical connection between the railroad active warning system and the traffic signal controller assembly for the purpose of preemption.
- "For Warning Signs" – signs that are electrically connected to a railroad crossing control circuit that is designed to illuminate the signs upon the approach or presence of a train.


**Figure 2-74: Examples of "For Warning Signs"**

### 4.C. Hwy Traffic Signal Preemption

Check the appropriate box for the type of preemption. This field is not applicable if "Not Interconnected" is chosen in field 4.B. and should be left blank.

Preemption is defined in the MUTCD as the transfer of the normal operation of highway traffic signals to a special control mode.

In this instance preemption occurs as a result of a signal received from the railroad active warning device system

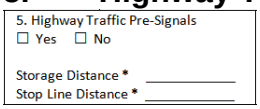
**Simultaneous preemption** is defined in the MUTCD as notification of approaching rail traffic that is forwarded to the highway traffic signal controller unit or assembly and railroad active warning devices at the same time.

Simultaneous preemption results in the initiation of the highway traffic signal cycle at the same time the highway-rail grade crossing warning system is activated.

**Advance preemption** is defined in the MUTCD as notification of approaching rail traffic that is forwarded to the highway traffic signal controller unit or assembly by the railroad equipment in advance of the activation of the railroad warning devices.

Advance preemption results in the initiation of the highway traffic signal cycle before the highway-rail grade crossing active warning system is activated.

### 5. Highway Traffic Pre-Signals


5. Highway Traffic Pre-Signals
☐ Yes ☐ No

Storage Distance * _____
Stop Line Distance * _____

**Figure 2-75: U.S. DOT-FRA Crossing Inventory Form Part III, Item 5**

Check the "Yes" box to indicate if highway traffic pre-signals are installed. Check the "No" box if there are none. The "Storage Distance" and "Stop Line Distance" fields are optional. Use feet as the measuring unit.

Pre-signals are used to control traffic approaching a grade crossing in conjunction with the highway traffic control signal faces that control traffic approaching a highway-highway intersection beyond the tracks. Pre-signals may be located on either the near or far side of the railroad tracks, and may be mounted on the same cantilever structures as the railroad's flashing light warning devices.

- "Storage Distance" (for pre-signals only) is the distance available for vehicle storage as measured 6 feet from the rail nearest the intersection to the intersection stop line or the normal stopping point on the roadway.

- "Stop Line Distance" (for pre-signals only) is the distance between the stop line and the crossing gates. This field should be left blank if the crossing is not equipped with gates.

## 6. Highway Monitoring Devices

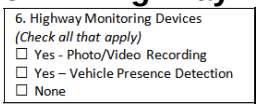

6. Highway Monitoring Devices
*(Check all that apply)*
☐ Yes - Photo/Video Recording
☐ Yes – Vehicle Presence Detection
☐ None

**Figure 2-76: U.S. DOT-FRA Crossing Inventory Form Part III, Item 6**

Check all boxes that apply. Note: The temporary installation of highway monitoring devices (e.g., for research purposes) should not be reported to the Crossing Inventory.

- "Check the "Yes" box if "Photo/Video Recording" is present at the crossing. Photo/Video Recording is the use of high-resolution cameras to photograph or record motorists driving under or around railroad crossing gates. The camera equipment is typically mounted in a 12-foot-high bullet-resistant cabinet. There may be signs, installed on all street approaches to the crossing, that inform motorists that photo citations are being issued to violators at the crossing. Note – The temporary installation of photo/video recording devices (e.g., for research purposes) are not to be reported.

- Check the "Yes" box if "Vehicle Presence Detection" is present at the crossing. Vehicle Presence Detection is system capable of detecting and reporting in real time the presence of a vehicle on the crossing. An example includes a series of looped wire, coils, or magnetometers that are placed below ground level within the field side and gauge side of the railroad tracks, at a distance between the approach gate and the exit gate. The loop detectors or magnetometers use a magnetic effect caused by the presence of a roadway vehicle, which then sends a signal to the exit gate to remain in the up position, or can send a signal to the train operator that a vehicle is still occupying the restricted area of the grade crossing.

- Check the "None" box if neither Photo/Video Recording nor Vehicle Presence Detection are at the crossing or if the crossing is passive.

- Note: This field applies for crossings with train-activated warning devices. If monitoring is conducted at passive crossings, it should be noted in Part I, Box 30 or 31, as appropriate.

# 5. Part IV – Physical Characteristics

| Part IV: Physical Characteristics | | | |
|---|---|---|---|
| 1. Traffic Lanes Crossing Railroad ☐ One-way Traffic ☐ Two-way Traffic<br>Number of Lanes _____ ☐ Divided Traffic | 2. Is Roadway/Pathway Paved?<br>☐ Yes ☐ No | 3. Does Track Run Down a Street?<br>☐ Yes ☐ No | 4. Is Crossing Illuminated? *(Street lights within approx. 50 feet from nearest rail)* ☐ Yes ☐ No |
| 5. Crossing Surface *(on Main Track, multiple types allowed)* Installation Date * *(MM/YYYY)* _____/_____ Width * _____ Length * _____<br>☐ 1 Timber ☐ 2 Asphalt ☐ 3 Asphalt and Timber ☐ 4 Concrete ☐ 5 Concrete and Rubber ☐ 6 Rubber ☐ 7 Metal<br>☐ 8 Unconsolidated ☐ 9 Composite ☐ 10 Other *(specify)* _____ | | | |
| 6. Intersecting Roadway within 500 feet?<br>☐ Yes ☐ No If Yes, Approximate Distance *(feet)* _____ | 7. Smallest Crossing Angle<br>☐ 0° – 29° ☐ 30° – 59° ☐ 60° - 90° | 8. Is Commercial Power Available? *<br>☐ Yes ☐ No | |

**Figure 2-77: U.S. DOT-FRA Crossing Inventory Form Part IV, Physical Characteristics**

## 1. Traffic Lanes Crossing Railroad

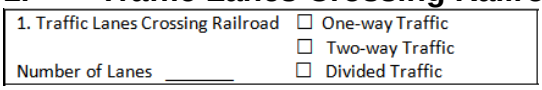



**Figure 2-78: U.S. DOT-FRA Crossing Inventory Form Part IV, Item 1**

Enter the number of through traffic lanes crossing the track. Do not include shoulders or lanes that are used for parking. Check the box that describes the type of roadway. If channelization devices are present at the crossing, then it can only be classified as "Two-way Traffic."

- "One-way Traffic" – Where highway motor vehicles travel in the same direction over the same roadway.
- "Two-way Traffic" – Where highway motor vehicles travel in two opposite directions over the same roadway.
- "Divided Traffic" – Where roadway traffic moving in opposite directions is separated by a median sufficient to prevent movement across it into opposing traffic.

Note: Divided traffic refers to the characteristics of the entire roadway, not simply at the crossing.

## 2. Is Roadway/Pathway Paved?

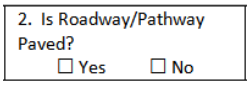



**Figure 2-79: U.S. DOT-FRA Crossing Inventory Form Part IV, Item 2**

Check "Yes" if the highway or pathway is paved with material on which pavement markings can be effectively maintained. Check "No" if the highway or pathway surface is gravel, dirt, or has a surface treatment on which pavement markings cannot be maintained. If the entire road or pathway is not paved, the roadway or pathway

pavement through the crossing must extend far enough beyond the railroad tracks to be able to accept railroad pavement markings, nominally about 100 feet, to be considered "Yes" for this Item. If pavement markings are indicated in Part III.2.F., then this item must be checked "Yes."

## 3. Does the Track Run Down a Street?

3. Does Track Run Down a Street?

☐ Yes ☐ No

**Figure 2-80: U.S. DOT-FRA Crossing Inventory Form Part IV, Item 3**

**Figure 2-81: Example of a track that runs down a street.**

Check "Yes" if the crossing involves a railroad track that is embedded within the pavement of a roadway that crosses another roadway at grade, such that trains operating on those tracks will cross the intersecting roadway. In addition, the "Yes" box may be checked if the tracks run alongside the roadway in the same direction as roadway vehicles, and if the tracks are located within or adjacent to the roadway right-of-way. In both cases, the crossing to be inventoried will be the crossing of the tracks with the intersecting roadway, not the roadway within or adjacent to the street where the tracks are running.

Check "No" if the tracks and crossties are in a semi-exclusive right-of-way with exposed ballast, and are separated from the roadway pavement by a curb or other such border or divider.

## 4. Is Crossing Illuminated? *(street lights within approx. 50 feet from nearest rail)*

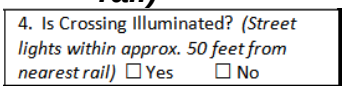

4. Is Crossing Illuminated? *(Street lights within approx. 50 feet from nearest rail)* ☐ Yes ☐ No

**Figure 2-82: U.S. DOT-FRA Crossing Inventory Form Part IV, Item 4**

Enter a check in the "Yes" box if the crossing is illuminated. Enter a check in the "No" box if the crossing is not illuminated. An illuminated crossing is defined as having overhead street lighting that provides reasonable illumination of trains present at the crossing and is located within approximately 50 feet of the crossing. Since streetlamp light intensity can vary, sufficient lighting may be provided by streetlights located up to 100 feet from the crossing, in which case, the "Yes" box may be checked.

## 5. Crossing Surface *(on Main Track, multiple types allowed)*

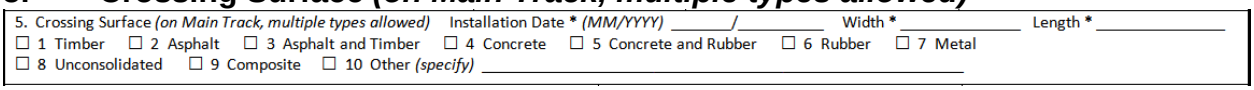

5. Crossing Surface *(on Main Track, multiple types allowed)* Installation Date * *(MM/YYYY)* _____/_____ Width * _____ Length * _____
☐ 1 Timber ☐ 2 Asphalt ☐ 3 Asphalt and Timber ☐ 4 Concrete ☐ 5 Concrete and Rubber ☐ 6 Rubber ☐ 7 Metal
☐ 8 Unconsolidated ☐ 9 Composite ☐ 10 Other *(specify)* _____

**Figure 2-83: U.S. DOT-FRA Crossing Inventory Form Part IV, Item 5**

Enter a check in the box which most closely fits the following descriptions. If there are multiple main line tracks that have different types of surfaces, indicate all types on the Inventory Form.

1. "Timber" – Includes sectional treated timber and full wood plank.
   - Sectional treated timber consists of prefabricated units approximately 8 feet in length of treated timber individually installed and removable for maintenance and replacement purposes.
   - Full wood plank consists of a timber surface that covers the entire crossing area above the crossties, made of ties, boards, bridge ties, etc.

2. "Asphalt" – Asphalt surface over the entire crossing area.

3. "Asphalt and Timber" – Asphalt surface in the area between flange timber planks or other material forming flangeway openings that may include the use of rubber.

4. "Concrete" – Includes concrete slab and concrete pavement.
   - Concrete slab consists of pre-cast concrete sections that are usually individually installed and removable for maintenance and replacement purposes.
   - Concrete pavement is a concrete surface that is continuous over the track area and is not removable except by destruction of the surface.

5. "Concrete and Rubber" – An installed crossing surface that consists of both concrete and rubber materials.

6. "Rubber" – Preformed rubber sections that are usually individually installed and removable for maintenance and replacement purposes.

7. "Metal" – Sections of steel or other metal that are usually individually installed and removable for maintenance purposes and provide complete coverage of the crossing area within the track.

8. "Unconsolidated" – Ballast or other unconsolidated material placed over crossties, with or without planks, on one or both sides of the running rails.

9. "Composite" – An engineered material formed from two or more distinct materials generally incorporating a polymer binder with reinforcing fibers and/or fillers to contribute enhanced properties and/or other property modifiers in a polymer matrix, typically post-consumer recycled high-density polyethylene, or HDPE, that are usually individually installed and removable for maintenance and replacement purposes .

10. "Other (Specify)" – Surfaces other than the previously described surfaces, including structural foam, plastic, "high-tech," etc.

    Note: This data field has been assigned to the State for updating. However, if the railroad installs a new crossing surface, the railroad must report that change.

Enter the month and year that the crossing surface was originally installed and opened to vehicular traffic in "MM/YYYY" format. Also, enter the width of the crossing, and the length of the crossing. For new and updated crossing surfaces, the date and measurements are required. These are optional fields for existing crossings that are already reported, but encouraged to be submitted by State entities.

- "Width" – The width of the crossing surface is measured in feet perpendicular to the railroad tracks and is the distance between the outermost edges of the crossing surface (including multiple tracks if present). In the event that the crossing surface is indistinguishable from the roadway approach, the width is the distance between the outermost rails of the crossing plus 4 feet.

- "Length" – The length of the crossing surface is measured in feet parallel to the tracks, along the improved surface of the crossing, which may extend beyond the edges of highway pavement and any sidewalks that may be present. In general, the crossing surface material will extend approximately 3 feet on each side beyond the roadway/pathway.

  Refer to the width and length diagram below:

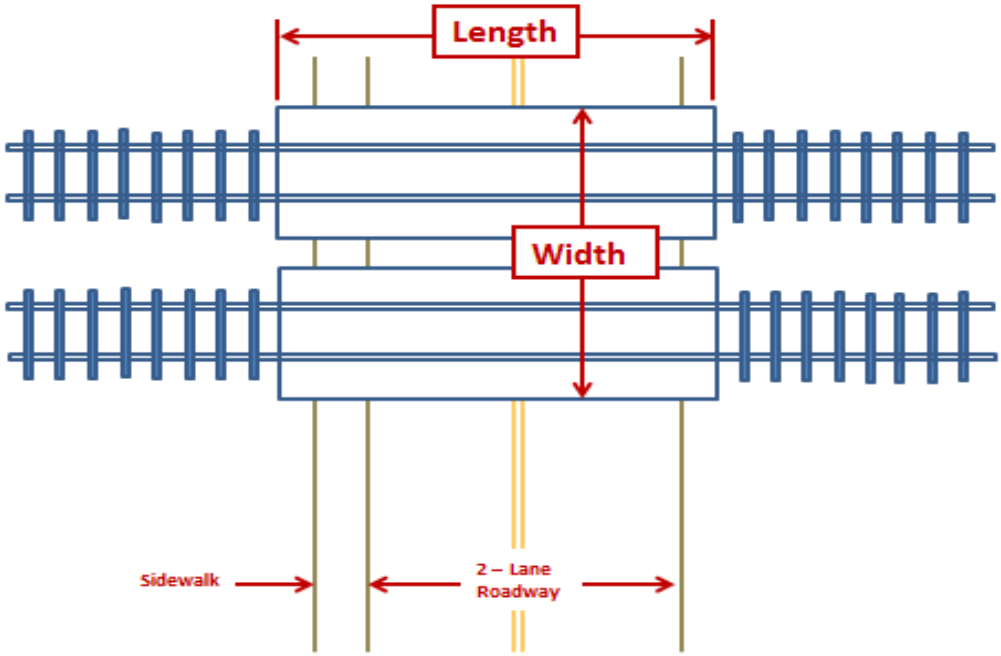



**Figure 2-84: Width and length measurement diagram**

## 6. Intersecting Roadway Within 500 Feet?

6. Intersecting Roadway within 500 feet?

☐ Yes ☐ No If Yes, Approximate Distance *(feet)* _____

**Figure 2-85: U.S. DOT-FRA Crossing Inventory Form Part IV, Item 6**

Enter a check in the "Yes" box if the street or highway for this crossing is intersected by another street or highway within 500 feet, and indicate the estimated distance from the crossing. Check "No" when no intersection exists within 500 feet. If the street or highway is intersected by another street or highway on both sides of the crossing, indicated the estimated distance from the closest intersection.

## 7. Smallest Crossing Angle

7. Smallest Crossing Angle

☐ 0° – 29° ☐ 30° – 59° ☐ 60° - 90°

**Figure 2-86: U.S. DOT-FRA Crossing Inventory Form Part IV, Item 7**

Enter a check in the box that most closely describes the smallest angle between the roadway and the track.

## 8. Is Commercial Power Available?

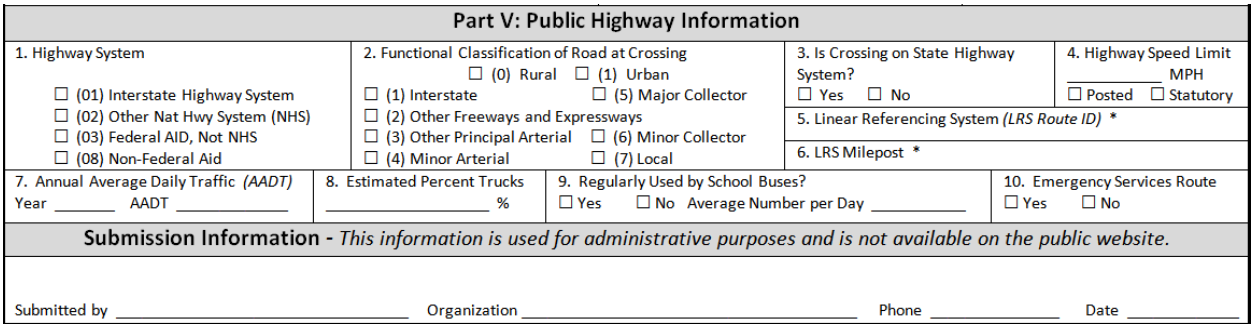
8. Is Commercial Power Available? *

☐ Yes ☐ No

**Figure 2-87: U.S. DOT-FRA Crossing Inventory Form Part IV, Item 8**

Enter a check to indicate whether there is commercial electric power available within 500 feet of the crossing. This field is optional.

# 6. Part V – Public Highway Information



**Part V: Public Highway Information**

1. Highway System
☐ (01) Interstate Highway System
☐ (02) Other Nat Hwy System (NHS)
☐ (03) Federal AID, Not NHS
☐ (08) Non-Federal Aid

2. Functional Classification of Road at Crossing
☐ (0) Rural ☐ (1) Urban
☐ (1) Interstate ☐ (5) Major Collector
☐ (2) Other Freeways and Expressways
☐ (3) Other Principal Arterial ☐ (6) Minor Collector
☐ (4) Minor Arterial ☐ (7) Local

3. Is Crossing on State Highway System?
☐ Yes ☐ No

4. Highway Speed Limit
_____ MPH
☐ Posted ☐ Statutory

5. Linear Referencing System *(LRS Route ID)* *

6. LRS Milepost *

7. Annual Average Daily Traffic *(AADT)*
Year _____ AADT _____

8. Estimated Percent Trucks
_____ %

9. Regularly Used by School Buses?
☐ Yes ☐ No Average Number per Day _____

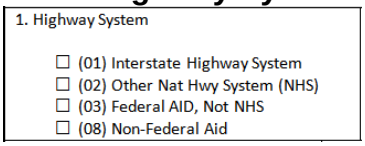
10. Emergency Services Route
☐ Yes ☐ No

**Submission Information** - *This information is used for administrative purposes and is not available on the public website.*

Submitted by _____ Organization _____ Phone _____ Date _____

**Figure 2-88: U.S. DOT-FRA Crossing Inventory Form Part V, Public Highway Information, and Submission Information**

## 1. Highway System



1. Highway System
☐ (01) Interstate Highway System
☐ (02) Other Nat Hwy System (NHS)
☐ (03) Federal AID, Not NHS
☐ (08) Non-Federal Aid

**Figure 2-89: U.S. DOT-FRA Crossing Inventory Form Part V, Item 1**

Check the box for the correct highway system code. See Table 2-1 below for the correct code.

**Table 2-1: Highway System Codes**

| Code | Definition | Included |
|---|---|---|
| **01** | Interstate Highway System | Interstate, rural, and urban; (note that the Interstate is part of the National Highway System) |
| **02** | Other National Highway System (NHS) | Other urban and rural principal arterial, Non-Interstate |
| **03** | Federal Aid Highway, Not NHS | Rural major collector and higher category, or urban collector and higher category, not part of NHS |
| **08** | Non-Federal Aid | Local rural roads, rural minor collectors, and local urban city streets or any other non-Federal-Aid roadway |

## 2. Functional Classification of Road at Crossing

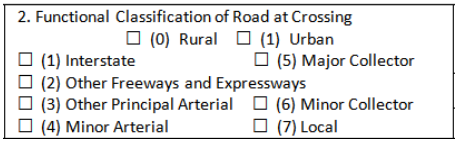



**Figure 2-90: U.S. DOT-FRA Crossing Inventory Form Part V, Item 2**

Check the box for the appropriate highway functional classification code for "Rural" or "Urban" and then check the box for the roadway type in accordance with Federal-aid highway program definitions. The "Urban" designation is based on the U.S. Census Bureau urban boundaries and a population of more than or equal to 5,000 people.

Functional classification is the grouping of highways, roads, and streets by the character of service they provide and can be applied in planning highway system development. It defines the part that any particular route should play in serving the flow of traffic through a highway network. The details and definitions for classifying systems can be found on FHWA's Web site at www.fhwa.dot.gov under "Guidelines for Functional Highway Classification System."

## 3. Is Crossing on State Highway System?

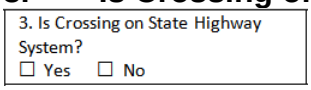



**Figure 2-91: U.S. DOT-FRA Crossing Inventory Form Part V, Item 3**

Check the appropriate box.

## 4. Highway Speed Limit

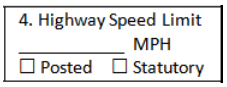



**Figure 2-92: U.S. DOT-FRA Crossing Inventory Form Part V, Item 4**

Enter the highway speed limit at the crossing in miles per hour (the speed limit value must be greater than zero). Check the appropriate box to indicate whether the speed limit is posted or statutory.

## 5. Linear Referencing System *(LRS Route ID)*

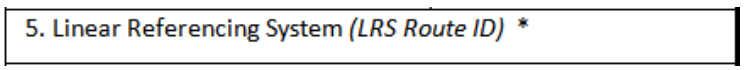



**Figure 2-93: U.S. DOT-FRA Crossing Inventory Form Part V, Item 5**

This is an optional field. Enter the "Linear Referencing System (LRS Route ID)" code. The LRS is a set of procedures for determining and retaining a record of specific points along a highway. Typical methods used are milepoint, milepost, reference point, and link-node.

It is recommended that this field use the Highway Performance Monitoring System (HPMS) data reported to FHWA. If a State uses more than one LRS for their own purposes, it is recommended that the information entered match the HPMS data. The details for the HPMS can be found on FHWA's Web site at: http://www.fhwa.dot.gov under Highway Performance Monitoring System.

## 6. LRS Milepost


**Figure 2-94: U.S. DOT-FRA Crossing Inventory Form Part V, Item 6**

This is an optional item. Enter the LRS milepost designation. Most at-grade highway-rail grade crossings are on highways without posted mileposts. Leave blank if none are posted.

## 7. Annual Average Daily Traffic *(AADT)*

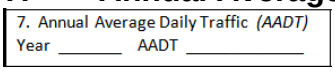



**Figure 2-95: U.S. DOT-FRA Crossing Inventory Form Part V, Item 7**

Enter the calendar year when the AADT was determined and the estimated AADT count through the crossing (total both directions) based on available traffic information. When a crossing runs diagonally through a highway-highway intersection, the total AADT should include both streets in both directions.

"Annual Average Daily Traffic (AADT)" – a figure that represents the amount of vehicles traveling past a known location on a roadway for a year, divided by 365 days. In the event that 365 consecutive days of traffic counts are not available, there are traffic engineering calculations that can be used to develop a representative figure for AADT based upon traffic counts of shorter duration.

## 8. Estimated Percent Trucks

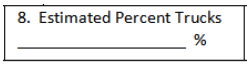



**Figure 2-96: U.S. DOT-FRA Crossing Inventory Form Part V, Item 8**

Enter the estimated percentage (0–99%) of trucks in the traffic stream. For the purposes of this manual, trucks are considered as those vehicles having a manufacturer's gross vehicle weight (GVW) rating of 9,000 lbs. or more and having dual tires on at least one rear axle. Also, buses, single-unit trucks, combination trucks, and campers/recreational vehicles are classified as trucks. Do not include school buses.

## 9. Regularly Used by School Buses?

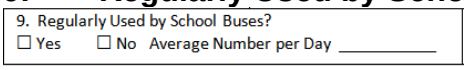



**Figure 2-97: U.S. DOT-FRA Crossing Inventory Form Part V, Item 9**

Check the "Yes" box if the crossing is regularly used by school buses. Check the "No" box if the crossing is not regularly used by school buses. "Regularly" means that there is at least one movement over the crossing, in either direction, by a school bus on a normal school day.

If the "Yes" box is checked, enter the average total number of times that a school bus crosses over the crossing, empty or full, on a normal school day. Back and forth movements count as two passes through the crossing.

## 10. Emergency Services Route

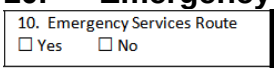



**Figure 2-98: U.S. DOT-FRA Crossing Inventory Form Part V, Item 10**

Check the "Yes" box if the crossing is routinely used by highway vehicles to obtain access to facilities that provide emergency services, such as hospitals and police and fire stations. Otherwise check the "No" box.

## Submission Information – *This information is used for administrative purposes and is not available on the public website.*

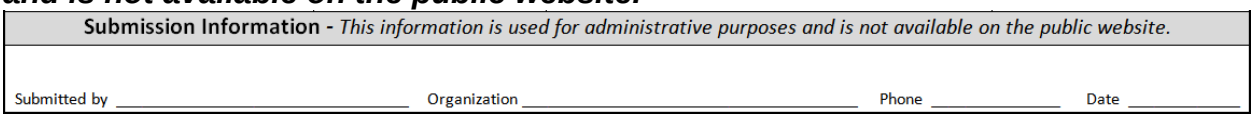



**Figure 2-99: U.S. DOT-FRA Crossing Inventory Form Submission Information**

Enter the name of the submitter, the organization represented by the submitter, the telephone number of the submitter, and the date that the Form is being submitted. If the crossing has multiple forms, the information provided in this section should relate to the submitting railroad. This information, "Name," "Organization," "Phone," and "Date" must be provided on the hardcopy Inventory Form only (not electronically). Information collected electronically will be captured through the user's account information and the time-stamped submittal action.

# APPENDIX A – U.S. DOT Crossing Inventory Form

## Obtaining an Inventory Number

Highway-rail and pathway crossings in the United States (both at-grade and grade-separated) must have an assigned U.S. DOT National Highway-Rail Crossing Inventory Number (Inventory Number).

Valid Inventory Numbers can be obtained by submitting an email request to: FRACrossingNumbers@dot.gov.

When submitting an email request for Inventory Numbers, please provide the total number of Inventory Numbers needed and the name, title, company, mailing address, phone number, and fax number of the requestor.

## Submission of the Inventory Form

The "U.S. DOT Crossing Inventory Form" (Form), is a two-page, single-sheet, five-part form that provides for easy photocopying and distribution to appropriate parties. The five parts of the form include the following categories:

Part I. Location and Classification Information
Part II. Railroad Information
Part III. Highway or Pathway Traffic Control Device Information
Part IV. Physical Characteristics
Part V. Public Highway Information

As reflected below, the type of crossing will dictate which parts of the Inventory Form must be completed by railroads for the initial reporting of new and previously unreported highway-rail grade and pathway crossings:

- Public Highway-Rail Grade Crossing: Complete entire Inventory Form (with the exception of I.20 and III.2.K);
- Private Highway-Rail Grade Crossing: Complete Header, plus Parts I, II, and III.2.K of the Inventory Form and the Submission Information section;
- Public Pathway Grade Crossing: Complete Header, plus Parts I and II of the Inventory Form (with the exception of I.20) and the Submission Information section;
- Private Pathway Grade Crossing: Complete Header, plus Parts I, II, and III.2.K of the Inventory Form and the Submission Information section;

- Pedestrian Station Grade Crossing (Station, Ped.): Complete Header, plus Parts I and II of the Inventory Form (with the exception of I.20) and Submission Information section;

- Grade-Separated Crossing (highway-rail, pathway, and pedestrian station): Complete Header, plus Part I of the Inventory Form (with the exception of I.20) and the Submission Information section.

For periodic updates to the Crossing Inventory, refer to the Responsibility Table in Appendix B for detailed instructions regarding which data fields must be updated at least every 3 years by the primary operating railroad.

For a change from a private highway-rail grade crossing to a public highway-rail grade crossing, railroads must complete the entire Inventory Form (with the exception of I.20 and III.2.K) with updated information.

For a change from a private pathway grade crossing to a public pathway grade crossing, railroads must update the Header, Parts I, II, and III.2.K of the Inventory Form and the Submission Information section.

For changes in the crossing surface or a change in the crossing warning devices at a public highway-rail grade crossing, the primary operating railroad must complete all of the data fields in the Header of the Inventory Form, check the "Change in Data" box in "Reason for Update" field and update all data fields in Parts II and III on the Inventory Form. If a hardcopy Inventory Form update will be submitted to the Crossing Inventory, complete the Submission Information section of the Inventory Form as well.

**Hardcopy Submission**

Complete the Submission Information data field at the bottom of page 2 of the Inventory Form for all hardcopy submissions.

Please refer to FRA's Web site (www.fra.dot.gov) to obtain the mailing address for hard-copy Inventory Form submissions. To find the appropriate mailing address enter "crossing inventory" in the search box of the FRA homepage.

**Electronic Submission**

Completed Inventory Forms may also be submitted electronically to the U.S. DOT National Highway-Rail Crossing Inventory. Detailed instructions for the electronic submission of Inventory Forms can be found in the Electronic Submission Instructions, which is a separate document.

# U. S. DOT CROSSING INVENTORY FORM *(Draft as of 12/11/2014)*

**DEPARTMENT OF TRANSPORTATION**
FEDERAL RAILROAD ADMINISTRATION

OMB No. 2130-0017

Instructions for the initial reporting of the following types of new or previously unreported crossings: For public highway-rail grade crossings, complete the entire inventory Form. For private highway-rail grade crossings, complete the Header, Parts I and II, and the Submission Information section. For public pathway grade crossings (including pedestrian station grade crossings), complete the Header, Parts I and II, and the Submission Information section. For Private pathway grade crossings, complete the Header, Parts I and II, and the Submission Information section. For grade-separated highway-rail or pathway crossings (including pedestrian station crossings), complete the Header, Part I, and the Submission Information section. For changes to existing data, complete the Header, Part I Items 1-3, and the Submission Information section, in addition to the updated data fields. Note: For private crossings only, Part I Item 20 and Part III Item 2.K. are required unless otherwise noted. An asterisk * denotes an optional field.

| A. Revision Date *(MM/DD/YYYY)* ____/____/____ | B. Reporting Agency ☐ Railroad ☐ Transit ☐ State ☐ Other | C. Reason for Update *(Select only one)* ☐ Change in Data ☐ Re-Open ☐ New Crossing ☐ Date Change Only ☐ Closed ☐ Change in Primary Operating RR ☐ No Train Traffic ☐ Admin. Correction ☐ Quiet Zone Update | D. DOT Crossing Inventory Number |
|---|---|---|---|

## Part I: Location and Classification Information

| 1. Primary Operating Railroad | 2. State | 3. County |
|---|---|---|
| 4. City / Municipality ☐ In ☐ Near | 5. Street/Road Name & Block Number *(Street/Road Name)* \| *(Block Number)* | 6. Highway Type & No. |
| 7. Do Other Railroads Operate a Separate Track at Crossing? ☐ Yes ☐ No If Yes, Specify RR | 8. Do Other Railroads Operate Over Your Track at Crossing? ☐ Yes ☐ No If Yes, Specify RR | |
| 9. Railroad Division or Region ☐ None | 10. Railroad Subdivision or District ☐ None | 11. Branch or Line Name ☐ None |
| 12. RR Milepost *(prefix)* \| *(nnnn.nnn)* \| *(suffix)* | | |
| 13. Line Segment * | 14. Nearest RR Timetable Station * | 15. Parent RR *(if applicable)* ☐ N/A |
| 16. Crossing Owner *(if applicable)* ☐ N/A | | |
| 17. Crossing Type ☐ Public ☐ Private | 18. Crossing Purpose ☐ Highway ☐ Pathway, Ped. ☐ Station, Ped. | 19. Crossing Position ☐ At Grade ☐ RR Under ☐ RR Over |
| 20. Public Access *(if Private Crossing)* ☐ Yes ☐ No | 21. Type of Train ☐ Freight ☐ Intercity Passenger ☐ Commuter ☐ Transit ☐ Shared Use Transit ☐ Tourist/Other | 22. Average Passenger Train Count Per Day ☐ Less Than One Per Day ☐ Number Per Day ____ |
| 23. Type of Land Use ☐ Open Space ☐ Farm ☐ Residential ☐ Commercial ☐ Industrial ☐ Institutional ☐ Recreational ☐ RR Yard | | |
| 24. Is there an Adjacent Crossing with a Separate Number? ☐ Yes ☐ No If Yes, Provide Crossing Number | 25. Quiet Zone *(FRA provided)* ☐ No ☐ 24 Hr ☐ Partial ☐ Chicago Excused Date Established | |
| 26. HSR Corridor ID ☐ N/A | 27. Latitude in decimal degrees *(WGS84 std: nn.nnnnnn)* | 28. Longitude in decimal degrees *(WGS84 std: -nnn.nnnnnn)* |
| 29. Lat/Long Source ☐ Actual ☐ Estimated | | |
| 30.A. Railroad Use * | | 31.A. State Use * |
| 30.B. Railroad Use * | | 31.B. State Use * |
| 30.C. Railroad Use * | | 31.C. State Use * |
| 30.D. Railroad Use * | | 31.D. State Use * |
| 32.A. Narrative *(Railroad Use)* * | | 32.B. Narrative *(State Use)* * |
| 33. Emergency Notification Telephone No. *(posted)* | 34. Railroad Contact *(Telephone No.)* | 35. State Contact *(Telephone No.)* |

## Part II: Railroad Information

| 1. Estimated Number of Daily Train Movements | | | | |
|---|---|---|---|---|
| 1.A. Total Day Thru Trains *(6 AM to 6 PM)* | 1.B. Total Night Thru Trains *(6 PM to 6 AM)* | 1.C. Total Switching Trains | 1.D. Total Transit Trains | 1.E. Check if Less Than One Movement Per Day ☐ How many trains per week? ____ |
| 2. Year of Train Count Data *(YYYY)* | 3. Speed of Train at Crossing 3.A. Maximum Timetable Speed *(mph)* ____ 3.B. Typical Speed Range Over Crossing *(mph)* From ____ to ____ | | | |
| 4. Type and Count of Tracks Main ____ Siding ____ Yard ____ Transit ____ Industry ____ | | | | |
| 5. Train Detection *(Main Track only)* ☐ Constant Warning Time ☐ Motion Detection ☐AFO ☐ PTC ☐ DC ☐ Other ☐ None | | | | |
| 6. Is Track Signaled? ☐ Yes ☐ No | 7.A. Event Recorder ☐ Yes ☐ No | 7.B. Remote Health Monitoring ☐ Yes ☐ No | | |

## U. S. DOT CROSSING INVENTORY FORM *(Draft as of 12/11/2014)*

| A. Revision Date *(MM/DD/YYYY)* | PAGE 2 | D. Crossing Inventory Number *(7 char.)* |
|---|---|---|

### Part III: Highway or Pathway Traffic Control Device Information

**1. Are there Signs or Signals?** ☐ Yes ☐ No

**2. Types of Passive Traffic Control Devices associated with the Crossing**

| 2.A. Crossbuck Assemblies *(count)* | 2.B. STOP Signs *(R1-1)* *(count)* | 2.C. YIELD Signs *(R1-2)* *(count)* | 2.D. Advance Warning Signs *(Check all that apply; include count)* ☐ None |
|---|---|---|---|
| | | | ☐ W10-1 _____ ☐ W10-3 _____ ☐ W10-11 _____ ☐ W10-2 _____ ☐ W10-4 _____ ☐ W10-12 _____ |

| 2.E. Low Ground Clearance Sign *(W10-5)* | 2.F. Pavement Markings | 2.G. Channelization Devices/Medians | 2.H. EXEMPT Sign *(R15-3)* | 2.I. ENS Sign *(I-13)* Displayed |
|---|---|---|---|---|
| ☐ Yes *(count_____)* ☐ No | ☐ Stop Lines ☐ Dynamic Envelope ☐ RR Xing Symbols ☐ None | ☐ All Approaches ☐ Median ☐ One Approach ☐ None | ☐ Yes ☐ No | ☐ Yes ☐ No |

| 2.J. Other MUTCD Signs ☐ Yes ☐ No | 2.K. Private Crossing Signs *(if private)* | 2.L. LED Enhanced Signs *(List types)* |
|---|---|---|
| Specify Type _____ Count _____<br>Specify Type _____ Count _____<br>Specify Type _____ Count _____ | ☐ Yes ☐ No | |

**3. Types of Train Activated Warning Devices at the Grade Crossing *(specify count of each device for all that apply)***

| 3.A. Gate Arms *(count)* | 3.B. Gate Configuration | 3.C. Cantilevered *(or Bridged)* Flashing Light Structures *(count)* | 3.D. Mast Mounted Flashing Lights *(count of masts)* _____ | 3.E. Total Count of Flashing Light Pairs |
|---|---|---|---|---|
| Roadway _____<br>Pedestrian _____ | ☐ 2 Quad ☐ 3 Quad ☐ 4 Quad ☐ Full *(Barrier)* Resistance ☐ Median Gates | Over Traffic Lane _____ ☐ Incandescent<br>Not Over Traffic Lane _____ ☐ LED | ☐ Incandescent ☐ LED ☐ Back Lights Included ☐ Side Lights Included | |

| 3.F. Installation Date of Current Active Warning Devices: *(MM/YYYY)* | 3.G. Wayside Horn | 3.H. Highway Traffic Signals Controlling Crossing | 3.I. Bells *(count)* |
|---|---|---|---|
| _____/_____ ☐ Not Required | ☐ Yes Installed on *(MM/YYYY)* _____/_____ ☐ No | ☐ Yes ☐ No | |

| 3.J. Non-Train Active Warning | 3.K. Other Flashing Lights or Warning Devices |
|---|---|
| ☐ Flagging/Flagman ☐ Manually Operated Signals ☐ Watchman ☐ Floodlighting ☐ None | Count _____ Specify type _____ |

| 4.A. Does nearby Hwy Intersection have Traffic Signals? | 4.B. Hwy Traffic Signal Interconnection | 4.C. Hwy Traffic Signal Preemption | 5. Highway Traffic Pre-Signals | 6. Highway Monitoring Devices *(Check all that apply)* |
|---|---|---|---|---|
| ☐ Yes ☐ No | ☐ Not Interconnected ☐ For Traffic Signals ☐ For Warning Signs | ☐ Simultaneous ☐ Advance | ☐ Yes ☐ No<br>Storage Distance * _____<br>Stop Line Distance * _____ | ☐ Yes - Photo/Video Recording ☐ Yes – Vehicle Presence Detection ☐ None |

### Part IV: Physical Characteristics

| 1. Traffic Lanes Crossing Railroad | 2. Is Roadway/Pathway Paved? | 3. Does Track Run Down a Street? | 4. Is Crossing Illuminated? *(Street lights within approx. 50 feet from nearest rail)* |
|---|---|---|---|
| ☐ One-way Traffic ☐ Two-way Traffic ☐ Divided Traffic<br>Number of Lanes _____ | ☐ Yes ☐ No | ☐ Yes ☐ No | ☐ Yes ☐ No |

5. Crossing Surface *(on Main Track, multiple types allowed)* Installation Date * *(MM/YYYY)* _____/_____ Width * _____ Length * _____
☐ 1 Timber ☐ 2 Asphalt ☐ 3 Asphalt and Timber ☐ 4 Concrete ☐ 5 Concrete and Rubber ☐ 6 Rubber ☐ 7 Metal
☐ 8 Unconsolidated ☐ 9 Composite ☐ 10 Other *(specify)* _____

| 6. Intersecting Roadway within 500 feet? | 7. Smallest Crossing Angle | 8. Is Commercial Power Available? * |
|---|---|---|
| ☐ Yes ☐ No If Yes, Approximate Distance *(feet)* _____ | ☐ 0° – 29° ☐ 30° – 59° ☐ 60° - 90° | ☐ Yes ☐ No |

### Part V: Public Highway Information

| 1. Highway System | 2. Functional Classification of Road at Crossing ☐ (0) Rural ☐ (1) Urban | 3. Is Crossing on State Highway System? | 4. Highway Speed Limit |
|---|---|---|---|
| ☐ (01) Interstate Highway System<br>☐ (02) Other Nat Hwy System (NHS)<br>☐ (03) Federal AID, Not NHS<br>☐ (08) Non-Federal Aid | ☐ (1) Interstate ☐ (5) Major Collector<br>☐ (2) Other Freeways and Expressways<br>☐ (3) Other Principal Arterial ☐ (6) Minor Collector<br>☐ (4) Minor Arterial ☐ (7) Local | ☐ Yes ☐ No<br>5. Linear Referencing System *(LRS Route ID)* *<br>6. LRS Milepost * | _____ MPH ☐ Posted ☐ Statutory |

| 7. Annual Average Daily Traffic *(AADT)* | 8. Estimated Percent Trucks | 9. Regularly Used by School Buses? | 10. Emergency Services Route |
|---|---|---|---|
| Year _____ AADT _____ | _____ % | ☐ Yes ☐ No Average Number per Day _____ | ☐ Yes ☐ No |

**Submission Information** - *This information is used for administrative purposes and is not available on the public website.*

Submitted by _____ Organization _____ Phone _____ Date _____

Public reporting burden for this information collection is estimated to average 30 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed and completing and reviewing the collection of information. According to the Paperwork Reduction Act of 1995, a federal agency may not conduct or sponsor, and a person is not required to, nor shall a person be subject to a penalty for failure to comply with, a collection of information unless it displays a currently valid OMB control number. The valid OMB control number for information collection is 2130-0017. Send comments regarding this burden estimate or any other aspect of this collection, including for reducing this burden to: Information Collection Officer, Federal Railroad Administration, 1200 New Jersey Ave. SE, MS-25 Washington, DC 20590.

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## APPENDIX B – Responsibility Table for Periodic Updates to the Crossing Inventory

This responsibility table only **applies to periodic updates to** the Crossing Inventory. This table is intended to clarify which fields have been assigned to primary operating railroads (i.e., railroad or urban rapid transit operator) for updating and which fields have been assigned to State agencies for voluntary updating.

For guidance on reporting new and previously unreported crossings, please refer to the Introduction and Appendix A to this Guide.

Entities subject to FRA's final rule on National Highway-Rail Crossing Inventory Reporting Requirements should refer to the rule published in the Federal Register, as well as the additional information provided in this Guide. Should any portion of this table conflict with the final rule, the language of the final rule shall govern.

O – Optional; R – Required; C – Conditionally Required; – Not Applicable (see Guide for instructions)

| Box | Field | Update Provided by State | | Update Provided by Railroad or Transit | |
|---|---|---|---|---|---|
| | | Public | Private | Public | Private |
| **Header** | | | | | |
| A. | Revision Date | R | | R | R |
| B. | Reporting Agency | R | | R | R |
| C. | Reason for Update | R | | R | R |
| D. | DOT Crossing Inventory Number | R | | R | R |
| **Part I: Location and Classification Information** | | | | | |
| 1. | Primary Operating Railroad | | | R | R |
| 2. | State | R | | | R |
| 3. | County | R | | | R |
| 4. | City/Municipality | R | | | R |
| 5. | Street/Road Name & Block Number | R | | | R |
| 6. | Highway Type & No. | R | | | R |
| 7. | Do Other Railroads Operate a Separate Track | | | R | R |
| 8. | Do Other Railroads Operate over Your Track | | | R | R |
| 9. | Railroad Division or Region | | | R | R |
| 10. | Railroad Subdivision or District | | | R | R |
| 11. | Branch or Line Name | | | R | R |
| 12. | RR Milepost | | | R | R |
| 13. | Line Segment | | | O | O |
| 14. | Nearest RR Timetable Station | | | O | O |
| 15. | Parent RR | | | R | R |
| 16. | Crossing Owner | | | R | R |

| Box | Field | Update Provided by State | | Update Provided by Railroad or Transit | |
|---|---|---|---|---|---|
| | | Public | Private | Public | Private |
| 17. | Crossing Type | R | | | R |
| 18. | Crossing Purpose | R | | | R |
| 19. | Crossing Position | R | | | R |
| 20. | Public Access | | | | R |
| 21. | Type of Train Service | | | R | R |
| 22. | Average Passenger Train Count Per Day | | | R | R |
| 23. | Type of Land Use | R | | | R |
| 24. | Is There an Adjacent Crossing with a Separate Number? | R | | | R |
| 25. | Quiet Zone | | | | |
| 26. | HSR Corridor ID | R | | | R |
| 27. | Latitude in decimal degrees | R | | | R |
| 28. | Longitude in decimal degrees | R | | | R |
| 29. | Lat/Long Source | R | | | R |
| 30.A. | Railroad Use | O | | | O |
| 30.B. | Railroad Use | O | | | O |
| 30.C. | Railroad Use | O | | | O |
| 30.D. | Railroad Use | O | | | O |
| 31.A. | State Use | O | | | O |
| 31.B. | State Use | O | | | O |
| 31.C. | State Use | O | | | O |
| 31.D. | State Use | O | | | O |
| 32.A. | Narrative (Railroad Use) | O | | | O |
| 32.B. | Narrative (State Use) | O | | | O |
| 33. | Emergency Notification Telephone No. | | | R | R |
| 34. | Railroad Contact (Telephone No.) | | | R | R |
| 35. | State Contact (Telephone No.) | R | | | |
| **Part II: Railroad Information** | | | | | |
| 1.A. | Total Day Thru Trains *(6AM to 6PM)* | | | R | R |
| 1.B. | Total Night Thru Trains *(6AM to 6PM)* | | | R | R |
| 1.C. | Total Switching Trains | | | R | R |
| 1.D. | Total Transit Trains | | | R | R |
| 1.E. | Check If Less Than One Movement Per Day | | | C | C |
| 2 | Year of Train Count Data | | | R | R |
| 3.A | Maximum Timetable Speed (mph) | | | R | R |
| 3.B | Typical Speed Range Over Crossing (mph) | | | R | R |
| 4. | Type and Count of Tracks | | | R | R |
| 5. | Train Detection (Main Track Only) | | | R | R |
| 6. | Is Track Signaled? | | | R | R |
| 7.A. | Event Recorder | | | C | C |
| 7.B. | Remote Health Monitoring | | | C | C |
| **Part III: Highway or Pathway Traffic Control Device Information** | | | | | |
| 1 | Are There Signs or Signals? | R | | | |

| Box | Field | Update Provided by State | | Update Provided by Railroad or Transit | |
|---|---|---|---|---|---|
| | | Public | Private | Public | Private |
| 2.A. | Crossbuck Assemblies | R | | | |
| 2.B. | STOP Signs *(R1-1)* | R | | | |
| 2.C. | YIELD Signs *(R1-2)* | R | | | |
| 2.D. | Advance Warning Signs | R | | | |
| 2.E. | Low Ground Clearance Sign *(W10-5)* | R | | | |
| 2.F. | Pavement Markings | R | | | |
| 2.G. | Channelization Devices / Medians | R | | | |
| 2.H. | EXEMPT Sign *(R15-3)* | R | | | |
| 2.I. | ENS Sign Displayed *(I-13)* | R | | | |
| 2.J. | Other MUTCD Signs | R | | | |
| 2.K. | Private Crossing Signs *(if Private)* | | | | R |
| 2.L. | LED Enhanced Signs | R | | | |
| 3.A. | Gate Arms | R | | | |
| 3.B. | Gate Configuration | R | | | |
| 3.C. | Cantilevered *(or Bridged)* Flashing Light Structures | R | | | |
| 3.D. | Mast Mounted Flashing Lights | R | | | |
| 3.E. | Total Count of Flashing Light Pairs | R | | | |
| 3.F. | Original Installation Date of Current Active Warning Devices | R | | | |
| 3.G. | Wayside Horn | R | | | |
| 3.H. | Highway Traffic Signals Controlling Crossing | R | | | |
| 3.I. | Bells | R | | | |
| 3.J. | Non-Train Active Warning | R | | | |
| 3.K. | Other Flashing Lights or Warning Devices | R | | | |
| 4.A. | Does nearby Highway Intersection Have Traffic Signals? | R | | | |
| 4.B. | Highway Traffic Signal Interconnection | R | | | |
| 4.C. | Highway Traffic Signal Preemption | C | | | |
| 5. | Highway Traffic Pre-Signals | R | | | |
| 6. | Highway Monitoring Devices | R | | | |
| **Part IV: Physical Characteristics** | | | | | |
| 1. | Traffic Lanes Crossing Railroad | R | | | |
| 2. | Is Roadway/Pathway Paved? | R | | | |
| 3. | Does Track Run Down a Street? | R | | | |
| 4. | Is Crossing Illuminated? | R | | | |
| 5. | Crossing Surface | R | | | |
| 6. | Intersecting Roadway Within 500 feet? | R | | | |
| 7. | Smallest Crossing Angle | R | | | |
| 8. | Is Commercial Power Available? | O | | | |
| **Part V: Public Highway Information** | | | | | |
| 1. | Highway System | R | | | |
| 2. | Functional Classification of Road at Crossing | R | | | |

| Box | Field | Update Provided by State | | Update Provided by Railroad or Transit | |
|---|---|---|---|---|---|
| | | Public | Private | Public | Private |
| 3. | Is Crossing on State Highway System? | R | | | |
| 4. | Highway Speed Limit | R | | | |
| 5. | Linear Referencing System (LRS Route ID) | O | | | |
| 6. | LRS Milepost | O | | | |
| 7. | Annual Average Daily Traffic (AADT) | R | | | |
| 8. | Estimated Percent Trucks | R | | | |
| 9. | Regularly Used by School Buses? | R | | | |
| 10. | Emergency Service Route | R | | | |
| **Submission Information** | | | | | |
| | Name | R | | R | R |
| | Organization | R | | R | R |
| | Phone | R | | R | R |
| | Date | R | | R | R |

Note: Please refer to the individual sections of this Guide for exceptions to the Crossing Inventory Responsibility Table above.

## APPENDIX C – Reporting Crossings That Have Multiple Operating Railroads

Except for situations where multiple railroads or urban rapid transit operators operate trains on separate tracks through the same crossing, if more than one operating railroad operates trains through a single highway-rail or pathway crossing, the primary operating railroad is responsible for submitting and updating crossing data on behalf of all the operating railroads that operate through the crossing.

Note: The primary operating railroad is the operating railroad that either owns or maintains the track through the highway-rail or pathway crossing, unless the crossing is located within a private company, port, or dock area. If more than one operating railroad either owns or maintains the track through the highway-rail or pathway crossing, or if no operating railroad owns or maintains the track through the highway-rail or pathway crossing, then the operating railroad that operates the highest number of trains through the crossing is the primary operating railroad. In the event that there is only one operating railroad that operates one or more trains through a highway-rail or pathway crossing, that operating railroad is the primary operating railroad.

Where multiple railroads or urban rapid transit operators operate trains on separate tracks through the same crossing, each railroad or urban rapid transit operator must submit crossing data to the Crossing Inventory (see Part I, Item 7 above), and each must place its name in the field titled “Primary Operating Railroad” (this links each railroad to the data it has submitted). The primary operating railroad must submit the rest of the railroad-required data. Except for the train counts, the National Crossing Inventory Record will reflect the data for the primary operating railroad.

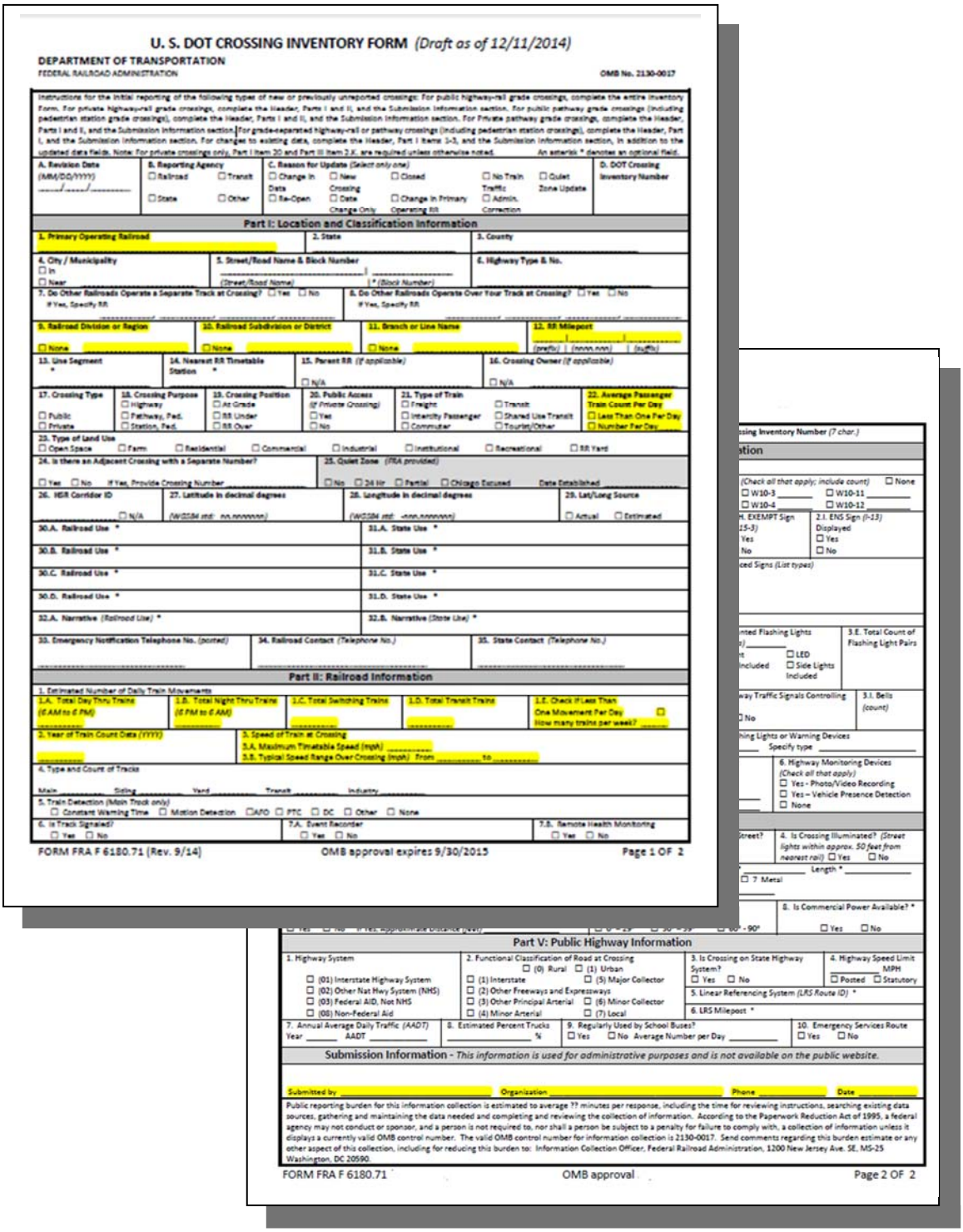
The FRA data management system will combine the critical data (such as train counts) to produce a combined Crossing Inventory Record for the crossing for analyzing the risk along with providing the individual records for each of the operating railroads. Each railroad must place its name in the field titled “Primary Operating Railroad” in Part 1, Box 1, in order to make clear which record belongs to which railroad.

Each Inventory Form submitted by multiple operating railroads for the same crossing will have the same crossing inventory number.

See the Figure below for an example of which fields must be completed and

updated by each railroad or urban rapid transit operator that operates trains on separate tracks through the same crossing.

**Areas highlighted in yellow are the fields required to be completed:**



U. S. DOT CROSSING INVENTORY FORM *(Draft as of 12/11/2014)*

DEPARTMENT OF TRANSPORTATION
FEDERAL RAILROAD ADMINISTRATION

OMB No. 2130-0017

Part I: Location and Classification Information

Part II: Railroad Information

Part V: Public Highway Information

Submission Information - *This information is used for administrative purposes and is not available on the public website.*

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## APPENDIX D – Definitions

***Adjacent Crossings*** – grade crossings with separate Crossing Inventory Numbers, with their own separate warning devices, on the same vehicular highway or pathway, where the distance between the inside rail of each crossing, as measured along the highway or pathway, does not exceed 100 feet.

***Annual Average Daily Traffic*** (AADT) – a figure that represents the amount of vehicles traveling past a known location on a roadway for a year, divided by 365 days. In the event that 365 consecutive days of traffic counts are not available, there are traffic engineering calculations that can be used to develop a representative figure for AADT based upon traffic counts of shorter duration.

***Back Lights*** – a flashing light pair on the far side of the crossing, typically mounted 180 degrees on the signal mast or cantilever structure from the flashing light pair of the near side of the crossing.

***Channelization Device*** – a traffic separation system made up of a raised longitudinal channelizer with vertical panels or tubular delineators that is placed between opposing highway traffic lanes designed to alert or guide traffic around an obstacle or to direct traffic in a particular direction.

***Closed Crossing*** – a location where a previous crossing no longer exists because either the railroad tracks have been physically removed, or each pathway or roadway approach to the crossing has been physically removed, leaving behind no intersection of railroad tracks with either a pathway or roadway. A grade-separated highway-rail or pathway crossing that has been physically removed is also considered a closed crossing.

***Crossing Inventory*** – the U.S. DOT National Highway-Rail Crossing Inventory.

***Diagonal Crossing*** – a highway-rail crossing where the railroad tracks run diagonally through the highway-highway intersection, thus bisecting the two roadways. Only one Crossing Inventory Number is to be assigned to such locations.

***Event Recorder*** – a device designed to resist tampering that monitors and records data on information at the grade crossing location such as (but not limited to) train speed, direction of motion, time, and distance over the most recent timeframe (e.g. last 24 or 48 hours) of the grade crossing warning system operation.

***Flashing Light Pairs*** – two red-colored light units that flash alternately at a rate of 45 to 65 times per minute. The main components of a flashing light pair are the hood, background, roundel, lamp, lamp holder, reflector, and housing. The background is 20

or 24 inches in diameter and is painted a nonreflecting black to provide a contrast for the red light. The hood is also painted black.

***Gate*** – an automatically-operated traffic control device which, when activated into a horizontal position, is intended to physically impede users such that they are discouraged from entering a particular grade crossing.

> ***Two Quadrant Gates*** – a gate configuration featuring gates only on entrance lanes leading on to the crossing. If a crossing does not have any gates on any exit lanes leading off the crossing, then it is to be considered a "two-quadrant gate" crossing. Note: A gated crossing on a one-way street is to be considered a "2 Quad" gate configuration.
>
> ***Three Quadrant Gates*** – a specific gate configuration featuring gates on all entrance lanes leading on to the crossing, but with only one exit leading off the crossing that is equipped with a gate.
>
> ***Four Quadrant Gates*** – a specific gate configuration that features gates on all entrance and all exit lanes at the crossing. When four quadrant gates are activated and fully lowered, all entrance lanes and all exit lanes are blocked by gates .
>
> ***Full (Barrier) Resistance Gates*** – a gate-like device that is specifically designed to physically prevent a highway vehicle from entering the crossing area when the resistance gate system is fully deployed.
>
> ***Median Gates*** (sometimes referred to as dual entrance gates) – a supplemental gate installation located on a roadway's median (to the left of the travel lanes) that works in combination with a gate installed on the outside edge of the roadway (to the right of the travel lanes) to jointly provide blockage of multiple lanes on a single roadway approach to the crossing, with both gate arm tips meeting (2-foot maximum gap) in the middle.

***Grade Crossing*** – for purposes of the Inventory, either a highway-rail grade crossing, pathway grade crossing or pedestrian station grade crossing.

***Highway-Rail Crossing*** – for purposes of the Crossing Inventory, the location where one or more railroad tracks intersect with a public highway, road, street, or private roadway, either at-grade or grade-separated, including associated sidewalks.

A crossing includes those tracks that lie within the same pair of warning devices. Thus, an intersection of a roadway with 3 tracks (2 mainline and 1 spur) where the mainline tracks have flashing lights and the spur track has crossbucks would be considered two crossings with two separate crossing inventory numbers. One crossing would consist of the mainline tracks with the flashing lights and one crossing would consist of the spur track that has crossbucks.

***Highway-Rail Grade Crossing*** – for purposes of the Crossing Inventory, a highway-rail crossing that is at the same grade level as the railroad tracks.

***Inventory Form*** – the U.S. DOT Crossing Inventory Form (Form FRA F 6180.71).

***Inventory Number*** – the number assigned to a highway-rail crossing or pathway crossing in the Crossing Inventory.

***Median*** – a non-traversable portion of a divided highway separating the travel ways for traffic in opposite directions.

***MUTCD*** – the Manual on Uniform Traffic Control Devices published by the Federal Highway Administration.

***Open Crossing*** – a highway-rail crossing or pathway crossing where both railroad operations and highway or pathway traffic are possible.

***Operating Railroad*** – any railroad or urban rapid transit operator that operates one or more trains through a highway-rail crossing or pathway crossing on, or connected to, the general railroad system of transportation.

***Pathway*** – a path for authorized users, outside the traveled way and physically separated from the roadway by an open space or barrier and either within the highway right-of-way or within an independent alignment. Pathways include shared-use paths, but do not include sidewalks.

***Pathway Crossing*** – a pathway that: (1) is explicitly authorized by a public authority or a railroad; (2) is dedicated for the use of non-vehicular traffic including pedestrians, bicyclists, and others, (3) is not associated with a public highway, road, or street, or a private roadway; and (4) crosses one or more railroad tracks either at grade or grade-separated. However, an area where pedestrians trespass, even routinely, is not considered to be a pathway crossing.

Pathways that are contiguous with, or separate but adjacent to, highway-rail crossings are presumed to be part of the highway-rail crossing and are not considered separate crossings. However, pathways that are located more than 25 feet from the location where a highway, road, or street intersects with one or more railroad tracks are generally considered to be separate pathway crossings.

***Pathway Grade Crossing*** - for purposes of the Crossing Inventory, a pathway crossing that is at the same grade level as the tracks.

***Pedestrian Crossing*** - See Pathway Crossing.

***Pedestrian Station Crossing (Station, Ped.)*** – a pathway crossing located within a passenger station.

***Pedestrian Station Grade Crossing*** – a pedestrian station crossing that is at the same grade level as the tracks.

***Plant Railroad*** – a plant or installation that owns or leases a locomotive, uses that locomotive to switch cars throughout the plant or installation, and is moving goods solely for use in the facility's own industrial processes. The plant or installation could include track immediately adjacent to the plant or installation if the plant railroad leases the track from the general system railroad and the lease provides for (and actual practice entails) the exclusive use of that trackage by the plant railroad and the general system railroad for purposes of moving only cars shipped to or from the plant. A plant or installation that operates a locomotive to switch or move cars for other entities, even if solely within the confines of the plant or installation, rather than for its own purposes or industrial practices, will not be considered a plant railroad because the performance of such activity makes the operation part of the general railroad system of transportation.

***Primary Operating Railroad*** – the operating railroad that either owns or maintains the track through the highway-rail or pathway crossing, unless the crossing is located within a private company, port, or dock area. If more than one operating railroad either owns or maintains the track through the highway-rail or pathway crossing, or if no operating railroad owns or maintains the track through the highway-rail or pathway crossing, then the operating railroad that operates the highest number of trains through the crossing is the primary operating railroad. In the event that there is only one operating railroad that operates one or more trains through a highway-rail or pathway crossing, that operating railroad is the primary operating railroad.

For highway-rail and pathway crossings that are located within a private company, port, or dock area, each railroad that owns track leading to the private company, port, or dock area will be considered a primary operating railroad as applied to crossings within the private company, port, or dock area.

***Private Crossing*** – a highway-rail or pathway crossing that is not a public crossing. Typical types of private crossings include farm crossings, industrial plant crossings, and residential access crossings.

***Public Authority*** – the public entity responsible for traffic control or law enforcement at a highway-rail crossing or the public entity that authorized a pathway crossing.

***Public Crossing*** – a highway-rail or pathway crossing where the approaches are under the jurisdiction of and maintained by a public authority and open to public travel. All approaches must be under the jurisdiction of the public authority and no approach may be on private property, unless state law or regulation provides otherwise.

For purposes of this definition "*open to public travel"* means that the road or pathway section is available (except during scheduled periods, extreme weather or emergency conditions) and open to the general public for use without restrictive gates, prohibitive signs, or regulation. Restrictions for highway-rail crossings that are based on size, weight, or class of registration do not apply.

In situations where a State has empowered a public agency (such as a State Department of Transportation, State Highway Department, Public Utility Commission, State Commerce Commission, etc.) to make a determination as to whether crossings are public or private, such determinations will govern for Inventory purposes.

***Quiet Zone*** – a segment of a rail line, within which is situated one or a number of consecutive public highway-rail crossings at which locomotive horns are not routinely sounded.

***Remote Health Monitoring*** – an electronic system designed to remotely notify the railroad (typically the railroad signal maintainer or a trouble desk) that components of the automatic warning system are not functioning as intended.

***Side Lights*** – a flashing light pair, typically mounted on the signal mast or cantilever structure, used to warn vehicular traffic and/or pedestrians approaching from side streets, parking lots, driveways or pathways.

***Sidewalk*** – that portion of a street between the curb line, or lateral line of a roadway, and the adjacent property line. Sidewalks also include easements on private property that are paved or improved and intended for use by pedestrians.

***Temporary Crossing*** – a highway-rail or pathway crossing created to serve a specific activity for a temporary time period not to exceed six months. Temporary crossings do not need an inventory number and do not need to be reported to the Crossing Inventory.

***Through (Thru) Trains*** – trains whose primary responsibility is to operate over a route with defined beginning and end points.

# APPENDIX E – Frequently Asked Questions (FAQs)

**Q 1. Which types of crossings must be reported to the Crossing Inventory?**

All crossings, Highway-Rail, Pathway (formerly known as Pedestrian) and Pedestrian Station, either at-grade and grade-separated, must be reported to the Crossing Inventory, with the exception of temporary crossings. Temporary crossings are crossings that are created to serve a specific activity for a temporary time period not to exceed six months.

An Inventory Number must be assigned to each crossing that is reported to the Crossing Inventory, except for certain crossings that are discussed in more detail in the Inventory Guide.

**Q 2. If multiple operating railroads operate through a highway-rail or pathway crossing, which operating railroad is responsible for getting the Inventory number and filing the Inventory Forms?**

With the exception of highway-rail and pathway crossings where multiple railroads or urban rapid transit operators operate trains on separate tracks through the same crossing, the primary operating railroad will be responsible for requesting the Inventory Number and submitting crossing data (including periodic updates) to the Crossing Inventory for a particular highway-rail or pathway crossing.

The primary operating railroad either owns or maintains the track through the highway-rail or pathway crossing, unless the crossing is located within a private company, port, or dock area. If more than one operating railroad either owns or maintains the track through the highway-rail or pathway crossing, or if no operating railroad owns or maintains the track through the highway-rail or pathway crossing, then the operating railroad that operates the highest number of trains through the crossing is the primary operating railroad. In the event that there is only one operating railroad that operates one or more trains through a highway-rail or pathway crossing, that operating railroad is the primary operating railroad. For highway-rail and pathway crossings that are located within a private company, port, or dock area, each railroad that owns track leading to the private company, port, or dock area will be considered a primary operating railroad as applied to crossings within the private company, port, or dock area.

Please refer to Appendix C for detailed guidance on reporting to the Crossing Inventory when multiple railroads or urban rapid transit operators operate trains on separate tracks through the same highway-rail or pathway crossing.

**Q 3. Do I need to get an Inventory Number for a private crossing?**

Yes. Railroads must obtain Inventory numbers for private crossings.

This includes crossings that are in a plant area owned by a private corporation, in a port or dock area or in the rail yard of the operating railroad. The primary operating railroad may decide whether to assign one Inventory Number for each crossing on private property or for multiple crossings within the plant, port or dock area or rail yard.

**Q 4. Where can I get valid Crossing Inventory Numbers?**

To acquire crossing numbers from FRA, please send an e-mail to: FRACrossingNumbers@dot.gov.

**Q 5. How do I update the Crossing Inventory for my Railroad or State?**

Please refer to Appendix B of this Inventory Guide, the Crossing Inventory Responsibility Table, for information related to which data fields on the Inventory Forms need to be updated by railroads and/or the States.

With the exception of Class I railroads who must submit updates to the Crossing Inventory electronically, all non-Class I railroads and States may choose to submit updates to the Crossing Inventory electronically or by mailing updated Inventory Forms.

*Please see FRA's Web site for the correct mailing address for hardcopy U.S. DOT Crossing Inventory (Crossing Inventory) submissions.*

**Q 6. Can I submit Inventory Forms electronically?**

Yes. While Class I railroads are required to file Inventory data electronically, all railroads and States are encouraged to file data electronically in accordance with the instructions contained in this Inventory Guide.

**Q 7. Do I have to submit Inventory Forms electronically?**

Class I railroads must file their Inventory Forms electronically. Therefore, Inventory updates, as well as the submission of Inventory data for new and previously unreported crossings, will need to be submitted electronically to the Crossing Inventory by Class I railroads. All other operating railroads and the States may choose to submit Inventory Forms electronically, but are not required to do so.

**Q 8. Which parts of the Inventory Form must be completed for a new or previously unreported crossing?**

The type of crossing will dictate which parts of the Inventory Form must be completed by railroads for the initial reporting of new and previously unreported highway-rail and pathway crossings. The Inventory Form will be considered "completed", if the following parts of the Inventory Form are completed:

- Public Highway-Rail Grade Crossing: Complete entire Inventory Form (with the exception of I.20 and III.2.K);
- Private Highway-Rail Grade Crossing: Complete Header, plus Parts I, II, and III.2.K of the Inventory Form and the Submission Information section;
- Public Pathway Grade Crossing: Complete Header, plus Parts I and II of the Inventory Form (with the exception of I.20) and the Submission Information section;
- Private Pathway Grade Crossing: Complete Header, plus Parts I, II, and III.2.K of the Inventory Form and the Submission Information section;
- Pedestrian Station Grade Crossing (Station, Ped.): Complete Header, plus Parts I and II of the Inventory Form (with the exception of I.20) and Submission Information section;
- Grade-separated Crossing (highway-rail, pathway and pedestrian station): Complete Header, plus Part I of the Inventory Form (with the exception of I.20) and the Submission Information section.

**Q 9. Where do I send hardcopies of completed Inventory Forms?**

Please see FRA's webpage for correct mailing address for hard copy Crossing Inventory Submissions.

**Q 10. If I only need to submit a few Inventory Forms, can I scan them electronically and then submit them to the Crossing Inventory?**

Scanning a document for transmittal to the Crossing Inventory is considered a paper submission. This type of transmission does NOT constitute an electronic submission; therefore, Class I railroads may not use this form of submission.

Non-Class I railroads may transmit scanned documents to: rxiupdates@frasafety.net. This address goes to FRA's data processing contractor who will process the submittals in accordance with their workload.

**Q 11. Can I update crossing records online?**

Yes, FRA will provide a new secure web page to allow users to find and update data for highway-rail and pathway crossings that have already been entered into the Crossing Inventory.

**Q 12. Will use of the GX32 software count as an electronic submission?**

**No,** the GX32 software will be replaced with a secure web-based application that will provide the state/railroad user with similar functionality. This will allow the crossing data to be current and updates will be made instantaneously (with business rules in place to ensure that only allowable data elements can be changed). The new system will allow for more accurate record keeping and timely submissions. Use of this new web-based application will constitute electronic submission.

**Q 13. What if there is no change in the data that currently exists in the Crossing Inventory?**

Even if the railroad has verified that there is no change in the existing data in the Crossing Inventory, the railroad must submit an update to the Crossing Inventory, electronically or by using Form FRA F 6180.71 at least once every 3 years. In this instance, the Header on the Inventory Form will need to be completed. With respect to item C, "Reason for Update", in the Header, the box for "Date Change Only" should be checked, in order to signify that the current data in the Crossing Inventory is correct.

**Q 14. Do we have to update crossings that have been closed or are grade-separated?**

A crossing that has been reported to the Crossing Inventory as closed does not require further updating unless it is reopened. A grade-separated crossing that has been reported to the Crossing Inventory does not require further updating unless it is physically removed in which case it should be reported as closed.

**Q 15. Do we have to use the paper Form FRA F 6180.71 for updating?**

No, Class I railroads must submit updates to the Crossing Inventory electronically. All other railroads, urban rapid transit operators and the States are encouraged to submit updates to the Crossing Inventory electronically, but may submit hard copy updates.

**Q 16. How long will it take for Inventory updates to appear on FRA's Web site?**

Electronic submissions will be updated to the inventory immediately following a successful submission (i.e., all required data is provided and passes all validation rules). It generally takes between 1 to 3 months before updates will appear on

the Web site for hardcopy submissions. This is an estimate as the timeline is dependent upon the number of hardcopy submissions received and the amount of time to conduct manual data entry.

**Q 17. What is the best way to get started updating records for a State or Railroad that has thousands of crossings?**

For States and Railroads with a large number of crossings, the best way to get started updating the Crossing Inventory is to first determine which crossings have been entered into the Crossing Inventory. This can be accomplished by verification of the Inventory number in both the Crossing Inventory and the respective State or Railroad File. Compare only the Inventory Numbers, and then resolve the status of those that don't match (Open or Closed, or non-existent in either file). Next, carry the comparison further by verifying Public versus Private crossing type, and then State or Operating Railroad. Once there is agreement with regards to the existing number of crossings, Open or Closed status, Public or Private crossing type, and in which State or on which Operating Railroad, then the balance of the information can be checked, verified, and updated.

**Q 18. How do I get the most current Crossing Inventory data for our State or Railroad?**

The most current Crossing Inventory data is available for download from FRA's Safetydata Web site.

**Q 19. We are planning to develop our own database software for our own crossing inventory file. Are there consultants that have done this before that we can contact, and is there anything specific that we should know or do before we get started?**

There are several States and Railroads who have hired consulting firms to develop electronic databases for their crossing inventory records and for managing their crossing improvement program and contracts. You will need to contact the individual States or Railroads to determine which firms have performed in a satisfactory manner. However, if you decide to contract with a firm directly, you should instruct them to develop their data file structure to be compatible with the FRA data file so that data can be directly transferred to FRA without conversion. The consultant should use the Electronic Submission Instructions when developing the software. The Electronic Submission Instructions can be found on the Grade Crossing Inventory System (GCIS) secure site.

**Q 20. Where can I find information regarding the Format and Description of the Crossing Inventory Data Fields for electronic submissions?**

Information regarding the Format and Description of the Crossing Inventory data fields can be found in the Electronic Submission Instructions. The Electronic Submission Instructions can be found on the GCIS secure site.

**Q 21. How do I get crossing inventory data and information for my locale?**

Crossing records can be accessed from FRA's Safetydata Web site.

**Q 22. Who is responsible for reporting a closed crossing in the Inventory and how is it done?**

The primary operating railroad must report the closure of a highway-rail or pathway crossing to the Crossing Inventory, but the State may also report the closure of a public crossing.

Reporting a closed a crossing in the Crossing Inventory is a very simple process. A closed crossing can be reported by completing the Header information and checking "closed" in section C, "Reason for Update", in the Header of the Inventory Form. The date of the closure, if known, may be shown in Part I.30 or Part I.31, as appropriate.

A crossing that is closed remains in the Crossing Inventory forever. The Inventory number remains with that location forever, and the number cannot be reused at a different location. However, a crossing that has been closed can be reopened in the Crossing Inventory at any time in the future by simply updating the inventory record.

**Q 23. How do I report a crossing that has previously been closed and is now re-opened?**

Complete all of the data fields in the Header and check the "Re-Open" box in Item C of the Header of the Inventory Form. The reporting agency should coordinate with the other agency to update all of the data fields on the Inventory Form that have been assigned to the State and railroad for updating by Appendix B to the Inventory Guide.

Finally, if a hardcopy Inventory Form update will be submitted to the Crossing Inventory, the Submission Information section of the Inventory Form will also need to be completed.

**Q 24. How do I report the sale of a highway-rail or pathway crossing to the Crossing Inventory?**

First, complete all of the data fields in the Header of the Inventory Form. If the sale of the highway-rail or pathway crossing will result in a new primary operating

railroad, check the “Change in Primary Operating RR” box in Item C of the Header of the Inventory Form. However, if the sale of the Highway-Rail or Pathway Crossing will not result in a new primary operating railroad, check “Change in Data” box in item C of the Header of the Inventory Form.
In addition, if the sale of the crossing will result in a change to any of the following data fields, update the changed field:

- Item 1 in Part I of the Inventory Form (“Primary Operating Railroad”)
- Item 15 in Part I of the Inventory Form (“Parent RR”)
- Item 16 in Part I of the Inventory Form (“Crossing Owner”)

Finally, if a hard-copy Inventory Form update will be submitted to the Crossing Inventory, complete the Submission Information section of the Inventory Form as well.

**Q 25. Who needs to provide Latitude / Longitude data and in what format?**

For new or previously unreported crossings, the primary operating railroad is required to obtain and provide this information when submitting the initial Inventory Form to the Crossing Inventory. By design, data cannot be added to the Crossing Inventory without all applicable information being provided for a new or previously unreported crossing.

States are expected to provide updates for latitude and longitude data for public highway-rail crossings, including those that are grade-separated, and all public pathway crossings. Railroads are to provide updates for latitude and longitude data for private highway-rail crossings, including those that are grade-separated, and all private pathway crossings.

The FRA Office of Safety uses the WGS-84 (World Geodetic System 1984) datum standard. The Crossing Inventory requires Latitude and Longitude to be submitted in “Degrees.Digital Degrees” (DDD) format. The coordinates are to be measured at the center of the crossing. The measurement values are to be entered in decimal (DDD) format as (nn.nnnnnnn) for Latitude and as (-nnn.nnnnnnn) for Longitude. The values need to be taken to at least five (5) decimal places, but seven (7) decimal places are preferred. Please refer to the previous Inventory Guide discussion of Part I, Fields 27 and 28 on the Inventory Form, for additional information which includes conversion instructions from the “Degrees.Minutes.Seconds” (DMS) format.

**Q 26. How do you determine whether separate Inventory numbers should be assigned to crossings that are located in close proximity to each other?**

For purposes of the Crossing Inventory, a highway-rail crossing consists of those railroad tracks that lie between a pair of warning devices. Therefore, each crossing with its own pair of warning devices must have an Inventory number assigned.

**Q 27. Is a pathway ever considered to be a part of a highway-rail crossing?**

Pathways that are contiguous with, or separate but adjacent to, highway-rail crossings are presumed to be part of the highway-rail crossing and are not considered separate crossings. However, pathways that are located more than 25 feet from the location where a highway, road, or street intersects with one or more railroad tracks are generally considered to be separate pathway crossings.

**Q 28. A crossing that was closed seven years ago is being reopened for highway traffic. Does the crossing need a new inventory number?**

No. Inventory numbers stay with the location to which they were originally assigned. You must use the Inventory number that was previously assigned to the crossing.

**Q 29. A roadway is being modified which will result in the closure of an existing crossing and the opening of a new crossing 100 feet down the track. Since the crossing is essentially being relocated, can I use the Inventory number that has already been assigned?**

No. Inventory numbers stay with the location to which they were originally assigned. A new, unused Crossing Inventory number must be assigned to the new crossing.

**Q 30. Can a railroad or State change all the fields in an existing Inventory Record?**

No. The Responsibility Table for Updating Crossing Inventory Data, in Appendix B of this Guide, lists the data fields for which the railroads and States are responsible for updating. Unless prior written notification has been provided to FRA, if either party attempts to change fields that have not been assigned to it for updating, those changes will be not be implemented.

**Q 31. Can a railroad delegate to another railroad or state its responsibility to update the inventory?**

Yes, a railroad may allow a parent railroad or a State to update the inventory on its behalf. However, the railroad will still be held responsible for timely and accurate submission, regardless of any delegation. If the railroad would like to delegate its responsibility to submit and crossing data to a State agency or a

parent corporation, prior notification must be provided jointly to FRA in writing.

**Q 32. How often must the Inventory Record be updated?**

With the exception of crossing inventory records for grade-separated crossings and closed highway-rail and pathway crossings, the crossing inventory record must be updated at least every 3 years even if nothing has changed at the crossing. However, any crossing closure, change in crossing surface (e.g., timber to rubber) or change in the type of warning device (e.g., crossbuck to flashing lights and gates) must be reported within three months. In addition, FRA encourages updates as other crossing information changes.

**Q 33. Would electronic submission allow a railroad or State to update fields for which it is not responsible?**

The Railroad only has the ability to update the data fields for which it is responsible. Similarly, the State only has the ability to update the data fields for which the State is responsible, regardless of the method used to provide the update. The submitting entity should only submit updated data for processing for which it is responsible. Exceptions to this policy are, however, permitted when both entities have provided prior written notification to FRA.

**Q 34. When a crossing is being changed from Private to Public, what data must be provided by the submitting agency?**

For a change from a private highway-rail grade crossing to a public highway-rail grade crossing, railroads must complete the entire Inventory Form (with the exception of I.20 and III.2.K) with updated information.

For a change from a private pathway grade crossing to a public pathway grade crossing, railroads must update the Header, Parts I, II, and III.2.K of the Inventory Form and the Submission Information section.

**Q 35. If a private company, port or dock area, or a rail yard has multiple crossings, is it possible to have more than one Inventory number assigned to the facility?**

A. Although one Inventory Number may be assigned for all of the crossings in the facility, there are two reasons why a private company may have more than one Inventory Number:

1. A railroad may assign Inventory Numbers to specific crossings while assigning one Inventory Number to the remaining crossings.

2. If more than one operating railroad provides service to the private company from its own track (e.g., one track off of railroad X's track and one track off of railroad Y's track), each operating railroad must assign a

unique Inventory number for the private company. If a crossing accident occurs, the railroad that is involved in the collision must use the Inventory number that it assigned to the private company.

**Q36. How do I report a change in crossing characteristics (such as a change in the crossing surface or a change in the crossing warning devices) that is required by 49 CFR 234.411(c) at a public highway-rail grade crossing to the Crossing Inventory?**

Complete all of the data fields in the Header of the Inventory Form, checking the "Change in Data" box in Item C.

The primary operating railroad must update all data fields in Parts II and III on the Inventory Form.

Finally, if a hardcopy Inventory Form update will be submitted to the Crossing Inventory, the primary operating railroad must complete the Submission Information section of the Inventory Form as well.

## APPENDIX F – High-Speed Rail ID Corridor Designations and Codes

Key: "#" Use for Rail-Section Identifier (numeric 1 - 9) or use "X" if numeric not used. For High Speed Rail Corridor Codes for any new corridors that are not listed above, contact the FRA Crossing Inventory Program Manager.

| High-Speed Rail Corridor Designations and Codes | | |
|---|---|---|
| Code | Corridor | Route |
| | | |
| PNW# | Pacific Northwest | Vancouver - Seattle - Portland - Eugene |
| | | |
| CAV# | California | San Diego - Los Angeles - Stockton - Sacramento/Bay Area |
| CAC# | | Los Angeles - Bay Area - Sacramento |
| CLL# | | Los Angeles - Las Vegas |
| | | |
| CMM# | Chicago Hub | Chicago - Milwaukee - Minneapolis |
| CSK# | | Chicago - Springfield - St. Louis - Kansas City |
| CIC# | | Chicago - Indianapolis - Cincinnati |
| CKD# | | Chicago - Kalamazoo - Detroit |
| CTC# | | Chicago - Toledo - Cleveland |
| CIL# | | Indiana Extension: Indianapolis - Louisville |
| | | |
| CCC# | Ohio 3 C's | Cleveland - Columbus - Cincinnati |
| | | |
| KEY# | Keystone | Philadelphia - Harrisburg - Pittsburgh |
| | | |
| EMP# | Empire | New York - Albany - Buffalo |
| | | |
| NEP# | Northern New England | Boston - Portland |
| NEM# | Northern New England | Boston - Montreal |
| NEW# | New England | Boston - Albany |
| NHS# | Southern New England | New Haven - Hartford - Springfield |
| | | |
| NEC# | Northeast Corridor | Washington - Baltimore - Philadelphia - New York - New Haven - Boston |
| | | |

| High-Speed Rail Corridor Designations and Codes | | |
|---|---|---|
| Code | Corridor | Route |
| SER# | Southeast | Washington - Richmond - Raleigh |
| SES# | | Raleigh - Columbia - Savannah - Jesup - Jacksonville |
| SEC# | | Raleigh - Durham - Greensboro - Charlotte - Greenville - Atlanta - Macon |
| SEV# | | Virginia Extension: Richmond - Hampton Roads |
| SEG# | | Georgia Connection: Macon - Jesup |
| | | |
| FLX# | Florida | Miami - Orlando - Tampa |
| | | |
| GCA# | Gulf Coast | Atlanta - Birmingham - Meridian - New Orleans |
| GCM# | | Mobile - Biloxi - New Orleans - Houston |
| | | |
| SCA# | South Central | Dallas/Ft Worth - Austin - San Antonia |
| SCT# | | Dallas/Ft Worth - Texarkana - Little Rock |
| SCO# | | Dallas/Ft Worth - Oklahoma City - Tulsa |
| | | |