

# Grade Crossing Inventory System (GCIS)

Training Slides - Introduction  
2016

# Agenda

- GCIS 101
  - Overview
  - User Information, Registration, and Management
  - View, Add, Update Crossings
  - System Validations
- Application Demonstration
- Q&A
- Useful Reference Information

# Overview (1 of 2)

- New Regulation (49 CFR 234 Subpart F): Reporting of crossing inventory data is now mandatory for all railroads (effective date: 3/7/2015)
  - Previously unreported crossings: 1 year after effective date
  - New crossings: 6 months after becoming operational or 1 year after effective date
  - Updates: 3 years after most recent update or 1 year after effective date
  - Certain events require an update within three months
  - Given certain criteria, railroads may delegate responsibilities
  - Class 1 railroads MUST submit electronically

*The purpose of this presentation is to provide an introduction on how to submit inventory data electronically*

# Overview (2 of 2)

- The Grade Crossing Inventory System (GCIS) was designed to allow both Railroad and State users to submit inventory records electronically
- It is a role-based online application that allows users to view, add, and edit crossing data
- There are various methods for submitting data electronically, including a web form and bulk uploading of data (covered in Advanced training)

# User Roles

Roles	Description
Primary Users	<p>These are super users within an agency. These users can perform any actions on the site (as restricted by the system) that relates to their own agency. They can only manage users that are registered within their agency and can approve or deny secondary users within their own agency.</p> <p><b>Note:</b> These users are approved by FRA.</p>
Secondary Users	<p>These users can view and submit crossing inventory records for which they have access. They can also update their own profile information.</p> <p><b>Note:</b> These users are approved by their agency's Primary User.</p>

# Agency Types

- GCIS has three categories of agencies
  - Railroad
  - State
  - Transit
- Although the user roles from the previous slide remain the same, there are a few differences between what each agency can do within GCIS

Railroad	State	Transit
<ul style="list-style-type: none"><li>- All Class 1 Railroads are required to submit electronically</li><li>- May delegate responsibilities to the State or another Railroad</li><li>- Must use the Railroad template when using the File Upload feature</li></ul>	<ul style="list-style-type: none"><li>- Cannot submit new crossing records</li><li>- Cannot update private crossings</li><li>- Must use the State template when using the File Upload feature</li></ul>	<ul style="list-style-type: none"><li>- Has the same capability as Railroad users (except for delegating responsibilities)</li><li>- Use the Railroad template when using the File Upload feature</li></ul>

# Registration

- Users can register as a Primary or Secondary User for an agency
  - Primary Users are reviewed and approved by FRA
  - Secondary Users are reviewed, approved, and managed by their agency's Primary User
  - Only one Primary User can be registered for an agency
  - Multiple Secondary Users can register for an agency

# Registration

Sign In / Register

 **Federal Railroad Administration**  
Office of Safety Analysis

### User Account Registration

To request access to the GCIS system, please complete the form below to create an account.

First Name: *	<input type="text" value="Sample Test"/>
Last Name: *	<input type="text" value="User"/>
Phone Number: *	<input type="text" value="999-555-0000"/>
Email Address (Username): *	<input type="text" value="sample.test.user@test.com"/>
Security Question: *	<input type="text" value="What is your favorite sport?"/>
Security Answer: *	<input type="text" value="test"/>
User Request Type: *	<input type="radio"/> Primary <input checked="" type="radio"/> Secondary 
Agency Type: *	<input type="text" value="Railroad"/>
Agency: *	<input type="text" value="CSX Transportation [CSX]"/>

[What if my agency is not listed?](#)

Enter code as shown: \*



 [Privacy & Terms](#)

[View Privacy Policy](#)

# User Management

- Provides Primary Users with the ability to accept/reject Secondary User account requests, unlock accounts, change passwords, change user status and/or role, and edit user info
- Primary Users
  - Can manage any Secondary Users within their agency
- Secondary Users
  - Can manage their own account information
  - Can view, add, or update crossing inventory records

# User Management

Agency **CSX Transportation [CSX]** Change Welcome **Sample Test User (Primary User)** [ Sign Out ]

 **Federal Railroad Administration**  
Office of Safety Analysis

[Home](#) | [View Crossings](#) | [Update Crossings](#) | [Add New Crossing](#) | [File Upload](#) | [User Management](#) | [Reports](#) | [Help](#)

### Manage GCIS Users

[GCIS Home](#) > User Management

**User Profile** | Pending Secondary Users | Active Secondary Users | Inactive Secondary Users

**Manage My Profile**

First Name: \*     Last Name: \*     Phone Number: \*

I wish to receive the following types of email notifications:

Delegation      Crossing Data Submitted for my Agency      User Account Updates 

**Manage My Users**

View Privacy Policy | Contact Us

# Delegations

- Railroads can delegate reporting responsibility to the following agencies:
  1. A state
  2. Another railroad with business interests with his/her agency (e.g., members of the same holding company)
- Written notice of delegations must be sent via USPS mail to FRA for review and approval
  - In addition to USPS mail, a copy of the written notice can be sent electronically for quicker approval
- Once FRA set up the delegation within GCIS, Primary users will be able to view all delegations for their agency under the User Management > Delegations page

# GCIS Home Page (1 of 3)

- Contains quick links providing users the ability to quickly navigate to the view, add and update crossing pages
- Displays a Pending Crossing Records table
  - Provides a list of all crossing record(s) that were saved, but have not been submitted to the National Crossing Inventory
  - Includes crossings that were submitted using the File Upload or Secure API feature and failed validations
- For some users, a Multiple Forms Filed: Action Needed table will also be displayed
  - Provides a list of crossing records where the Primary Operating Railroad has selected your agency to submit your unique Railroad data (train count information)

# GCIS Home Page (2 of 3)

Agency **CSX Transportation [CSX]** 
Welcome **Sample Test User (Primary User)** [\[ Sign Out \]](#)

## Federal Railroad Administration

### Office of Safety Analysis

Home | View Crossings | Update Crossings | Add New Crossing | File Upload | User Management | Reports | Help

### Welcome to the Grade Crossing Inventory System (GCIS)

GCIS will allow agencies the ability to view, update, and add new crossing information about each public and private highway-railroad. You can navigate throughout the site by using the top-navigation menu or clicking on the links provided below.

- [View an Existing Crossing](#)
- [Update an Existing Crossing](#)
- [Add a New Crossing](#)

**Pending Crossing Records**
Multiple Forms Filed: Action(s) Needed

The table below provides a list of all saved crossing records you have access to edit, but have not been submitted to the National Crossing Inventory Record.

Crossing

**Pending Crossing Inventory Records**

CrossingID	Primary Operating Railroad	State	Report Type	Submission Type	Crossing Type	Crossing Purpose	Crossing Position	Date Modified	Action	
226792Y	CSX	WV	Full Inventory Record	Online Form	Private	Highway	At Grade	12/11/2015 10:23:06 AM	<input type="button" value="Edit"/>	<input type="button" value="Cancel"/>
227213R	CSX	KY	Full Inventory Record	Online Form	Public	Highway	At Grade	1/13/2016 9:00:01 AM	<input type="button" value="Edit"/>	<input type="button" value="Cancel"/>
227837G	CSX	KY	Full Inventory Record	Online Form	Public	Highway	At Grade	1/6/2016 10:22:20 AM	<input type="button" value="Edit"/>	<input type="button" value="Cancel"/>
630968T	CSX	NC	Full Inventory Record	Online Form	Public	Highway	At Grade	11/10/2015 2:22:24 PM	<input type="button" value="Edit"/>	<input type="button" value="Cancel"/>

|<< 1 >>|
Page: 1-3 of 3

[View Privacy Policy](#) | [Contact Us](#)

# GCIS Home Page (3 of 3)

Home View Crossings Update Crossings Add New Crossing File Upload User Management Reports Help

## Welcome to the Grade Crossing Inventory System (GCIS)

GCIS will allow agencies the ability to view, update, and add new crossing information about each public and private highway-railroad. You can navigate throughout the site by using the top-navigation menu or clicking on the links provided below.

- [View an Existing Crossing](#)
- [Update an Existing Crossing](#)
- [Add a New Crossing](#)

Pending Crossing Records **Multiple Forms Filed: Action(s) Needed**

The table below provides a list of all crossing records where the Primary Operating Railroad has selected Multiple Forms Filed and have listed your agency to submit your unique railroad data.

Multiple Forms Filed						
Crossing Number	Primary Operating Railroad	Crossing Type	Crossing Purpose	Crossing Position	Date Modified	Action
921758H	MBTA	Private	Highway	At Grade	3/7/2015 1:12:19 PM	<a href="#">Edit</a>
438057P	UP	Public	Highway	At Grade	3/7/2015 1:12:19 PM	<a href="#">Edit</a>
843900U	BHRR	Public	Highway	At Grade	3/7/2015 1:12:19 PM	<a href="#">Edit</a>
481483K	NS	Public	Highway	At Grade	3/7/2015 1:12:19 PM	<a href="#">Edit</a>
481470J	NS	Public	Highway	At Grade	3/7/2015 1:12:19 PM	<a href="#">Edit</a>

# View, Add, Update Crossings (1 of 7)

- View Existing Crossing
  - Provides all users with the ability to view a crossing record that was last published to the National Crossing Inventory
  - Crossing Number entered is validated
  - Ability to save a PDF copy of the record

# View, Add, Update Crossings (2 of 7)

Agency CSX Transportation [CSX] Change Welcome Sample Test User (Primary User) [Sign Out]

**Federal Railroad Administration**  
Office of Safety Analysis

Home View Crossings Update Crossings Add New Crossing File Upload User Management Reports Help

**View an Existing Crossing Inventory Record**  
GCIS Home > View Existing Crossings

This page will allow you to view an existing crossing inventory record that has been previously saved or submitted. To view a record, enter the Crossing Number provided in the field below, then press the View button.

Enter Crossing Number:  View

Note: Crossing Number must be six digits followed by a letter.

Agency CSX Transportation [CSX] Change Welcome Sample Test User (Primary User) [Sign Out]

**Federal Railroad Administration**  
Office of Safety Analysis

Home View Crossings Update Crossings Add New Crossing File Upload User Management Reports Help

**Online Grade Crossing Inventory Form**  
GCIS Home > View Existing Crossings > Grade Crossing Inventory Form

[Save a PDF Copy](#) Crossing ID = 536639N

Part I Part II Part III Parts IV and V

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, with the exception of Part I Item 20 and Part III Item 2.K. For private highway-rail grade crossings, complete the Header, Parts I and II, Part III Item 2.K., and the Submission Information section. For private 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, Part III Item 2.K., 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. An asterisk \* denotes an optional field.

A. Revision Date 04/03/1991	B. Reporting Agency <input checked="" type="radio"/> Railroad <input type="radio"/> State <input type="radio"/> Transit <input type="radio"/> FRA Internal	C. Reason for Update Closed	D. DOT Crossing Inventory Number 536639N
--------------------------------	---	--------------------------------	---

**Part I: Location and Classification Information**

1. Primary Operating Railroad Norfolk Southern Railway Company [N]	2. State MI	3. County KENT
4. City/Municipality <input checked="" type="radio"/> In PRINCETON <input type="radio"/> Near	5. Street/Road Name & Block Number MAKEMSON ST (Street/Road Name) * (Block Number)	6. Highway Type & No
7. Do Other Railroads Operate a Separate Track at Crossing? <input checked="" type="radio"/> Yes <input type="radio"/> No If Yes, Specify RR CSX Transportation [CSX] Select One.....	8. Do Other Railroads Operate Over Your Track at Crossing? <input type="radio"/> Yes <input checked="" type="radio"/> No If Yes, Specify RR Select One..... Select One.....	
9. Railroad Division or Region WESTERN <input type="checkbox"/> None	10. Railroad Subdivision or District WEST <input type="checkbox"/> None	11. Branch or Line Name <input type="checkbox"/> None
12. RR Milepost 0162.54 (prefix) nnnn.nnn (suffix)	13. Line Segment * PRINCETON	14. Nearest RR Timetable Station * Select One.....
15. Parent RR (if applicable) Select One..... <input type="checkbox"/> N/A	16. Crossing Owner (if applicable) Select One..... <input type="checkbox"/> N/A	17. Crossing Type <input checked="" type="radio"/> Public <input type="radio"/> Private
18. Crossing Purpose <input checked="" type="radio"/> Highway <input type="radio"/> Pathway, Ped. <input type="radio"/> Station, Ped.	19. Crossing Position <input checked="" type="radio"/> At Grade <input type="radio"/> RR Under <input type="radio"/> RR Over	20. Public Access (if Private Crossing) <input type="radio"/> Yes <input checked="" type="radio"/> No
21. Type of Train (Check all that apply) <input type="checkbox"/> Freight <input type="checkbox"/> Intercity Passenger <input type="checkbox"/> Commuter <input type="checkbox"/> Transit <input type="checkbox"/> Shared Use Transit <input type="checkbox"/> Tourist/Other		22. Average Passenger Train Count Per Day Less Than One Per Day <input type="text"/> 0 Number per day
23. Type of Land Use <input type="radio"/> Open Space <input type="radio"/> Farm <input checked="" type="radio"/> Residential <input type="radio"/> Commercial <input type="radio"/> Industrial <input type="radio"/> Institutional <input type="radio"/> Recreational <input type="radio"/> RR Yard		

Agency CSX Transportation [CSX] Change Welcome Sample Test User (Primary User) [Sign Out]

**Federal Railroad Administration**  
Office of Safety Analysis

Home View Crossings Update Crossings Add New Crossing File Upload User Management Reports Help

**View an Existing Crossing Inventory Record**  
GCIS Home > View Existing Crossings

This page will allow you to view an existing crossing inventory record that has been previously saved or submitted. To view a record, enter the Crossing Number provided in the field below, then press the View button.

Enter Crossing Number:  View

Note: Crossing Number must be six digits followed by a letter.

Railroad	Record Type	Action
Norfolk Southern Railway Company [NS]	Full Inventory Record	<a href="#">View Record</a>



# View, Add, Update Crossings (3 of 7)

- Update Existing Crossing
  - Provides users with the ability to:
    - 1) update crossing records that were previously saved
    - 2) update crossing records submitted through the File Upload interface or API but failed validation
    - 3) update successfully submitted crossing records that have been published to the National Crossing Inventory
  - Crossing Number is validated to ensure that it is associated with the user's agency and is not a new crossing

# View, Add, Update Crossings (4 of 7)

Agency CSX Transportation [CSX] Change Welcome Sample Test User (Primary User) [ Sign Out ]

**Federal Railroad Administration**  
Office of Safety Analysis

Home View Crossings Update Crossings Add New Crossing File Upload User Management Reports Help

**Online Grade Crossing Inventory Form**  
GCIS Home > Update Existing Crossing > Grade Crossing Inventory Form

Save a PDF Copy Crossing ID = 626889A

Part I Part II Part III Parts IV and V

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, with the exception of Part I Item 20 and Part III Item 2.K. For private highway-rail grade crossings, complete the Header, Parts I and II, Part III Item 2.K., 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, Part III Item 2.K., 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. An asterisk \* denotes an optional field.

A. Revision Date 02/17/2016	B. Reporting Agency <input checked="" type="radio"/> Railroad <input type="radio"/> State <input type="radio"/> Transit <input type="radio"/> FRA Internal	C. Reason for Update Select One.....	D. DOT Crossing Inventory Number 626889A
--------------------------------	---	---	---

**Part I: Location and Classification Information**

1. Primary Operating Railroad CSX Transportation [CSX]	2. State FL	3. County HILLSBOROUGH
4. City/Municipality <input type="radio"/> In TAMPA <input checked="" type="radio"/> Near	5. Street/Road Name & Block Number ARMENIA AVE <small>(Street/Road Name)</small> * (Block Number)	6. Highway Type & No CR 587
7. Do Other Railroads Operate a Separate Track at Crossing? <input type="radio"/> Yes <input checked="" type="radio"/> No If Yes, Specify RR Select One....., Select One....., Select One.....	8. Do Other Railroads Operate Over Your Track at Crossing? <input type="radio"/> Yes <input checked="" type="radio"/> No If Yes, Specify RR Select One....., Select One....., Select One.....	
9. Railroad Division or Region JACKSONVILLE <input type="checkbox"/> None	10. Railroad Subdivision or District CLEARWATER <input type="checkbox"/> None	11. Branch or Line Name <input type="checkbox"/> None
12. RR Milepost 0851.32 <small>(prefix) nnnn.nnn (suffix)</small>	13. Line Segment * SY	14. Nearest RR Timetable Station * SULPHUR SPRGS
15. Parent RR (if applicable) Select One..... <input type="checkbox"/> N/A	16. Crossing Owner (if applicable) Select One..... <input type="checkbox"/> N/A	



# View, Add, Update Crossings (5 of 7)

- Add New Crossing
  - Provides Railroad users with the ability to submit data for a new crossing that is not in the National Crossing Inventory
  - State users will not have the ability to submit a new crossing record to the National Crossing Inventory
    - The **Add New Crossing** button in the top navigation and the **Add a New Crossing** link on the home page will not be visible to State users
  - Crossing Number is validated to ensure that it is a new crossing

# View, Add, Update Crossings (6 of 7)

- Add New Crossing (con't)
  - 2 different types of submission is available
    - Primary Operating Railroad submitting a new crossing that currently does not exist. The system will display the full Online Grade Crossing Inventory Form (Full Inventory Record).
    - A Railroad agency that operates a separate track at a crossing associated with a different Primary Operating Railroad. The system will display the Online Grade Crossing Inventory Form (Railroad Data Only) with only certain fields required for Part I and II of the form.

# View, Add, Update Crossings (7 of 7)

Agency **CSX Transportation [CSX]** Change Welcome **Sample Test User (Primary User)** [ Sign Out ]

 **Federal Railroad Administration**  
**Office of Safety Analysis**

Home | View Crossings | Update Crossings | **Add New Crossing** | File Upload | User Management | Reports | Help

### Add a New Crossing Inventory Record

[GCIS Home](#) > Add New Crossing

This page will allow you to add a new crossing inventory record. To add a new record, enter the Crossing Number provided in the field below, then press the Add button.

Enter Crossing Number:

**Note:** Crossing Number must be six digits followed by a letter.

Submission Type:  I am a Primary Operating Railroad submitting a new crossing record.  
 I operate a separate track and am submitting only my unique railroad data.

[View Privacy Policy](#) | [Contact Us](#)

# Validations (1 of 2)

- Single Field Validations
  - Dependent on type of crossing and user agency
  - Checks to see if any required field(s) are missing
  - Ensures that valid data is provided (e.g., is a number, falls within an acceptable range, etc.)
- Cross Field Validations
  - Dependent on type, purpose, and position of crossing
  - Checks to make sure no conflicting data is submitted
  - Only applies when submitting a new crossing record or for Parts I & II when updating an existing record
- Business Rules Validations
  - Grants access to certain data elements based on agency permission (e.g., railroad vs. state)
- Once all validations have been passed, a user will be able to submit their crossing inventory record

# Validations (2 of 2)

Agency **CSX Transportation [CSX]** Change Welcome **Sample Test User (Primary User)** [ Sign Out ]

## Federal Railroad Administration

### Office of Safety Analysis

Home | View Crossings | Update Crossings | Add New Crossing | File Upload | User Management | Reports | Help

### Online Grade Crossing Inventory Form

[GCIS Home](#) > [Update Existing Crossing](#) > [Grade Crossing Inventory Form](#)

Crossing ID = 224406E

[Save a PDF Copy](#)  
[Click here to show or hide error messages](#)

**Validation Errors**

Code	Error Description	Section
162	Field I.16: Please provide the name of the Crossing Owner. If this does not apply, answer with N/A.	Part I: Location and Classification Information
132	Field I.22: Average Passenger Train Count is Less Than One Per Day. At least one of the following types of train service must be selected: Intercity Passenger, Commuter, Transit, Light Rail Shared, or Tourist/Other.	Part I: Location and Classification Information
044	Field II.1.C: Please enter the number of Total Switching Trains.	Part II: Railroad Information
050	Field II.2: Please enter the Year of Train Count Data in correct format (YYYY).	Part II: Railroad Information
057	Field II.4: The sum of the count of all track types must be greater than 0	Part II: Railroad Information

Part I | 
 Part II | 
 Part III | 
 Parts IV and V

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, with the exception of Part I Item 20 and Part III Item 2.K. For private highway-rail grade crossings, complete the Header, Parts I and II, Part III Item 2.K., and the Submission Information section. For public pathway grade crossings (including pedestrian station grade crossings), complete the Header, Parts I and II,

# Let's Take a Look!

<https://stage.fra.dot.gov/Gcis/>

# FRA Points of Contacts

- Policy, Procedures, and Guidance
  - Ron Ries - Staff Director  
[ronald.ries@dot.gov](mailto:ronald.ries@dot.gov)
  - JoAnn Scott - Program Analyst  
[joann.scott@dot.gov](mailto:joann.scott@dot.gov)
  - Kathryn Gresham - Trial Attorney  
[kathryn.gresham@dot.gov](mailto:kathryn.gresham@dot.gov)
- Technical Issues with Electronic System
  - GCIS Support Desk (See Next Slide)
  - Kebo Chen - Staff Director  
[kebo.chen@dot.gov](mailto:kebo.chen@dot.gov)
  - Lindsay Peters-Dawson – Program Analyst  
[lindsay.petersdawson@dot.gov](mailto:lindsay.petersdawson@dot.gov)

# Correspondence

- **Written notice of delegations**

Mr. Robert Lauby

Associate Administrator for Railroad Safety

Department of Transportation

1200 New Jersey Avenue, SE

Washington, DC 20590

Electronic copies can be emailed to: [joann.scott@dot.gov](mailto:joann.scott@dot.gov)

- **GCIS Technical Support**

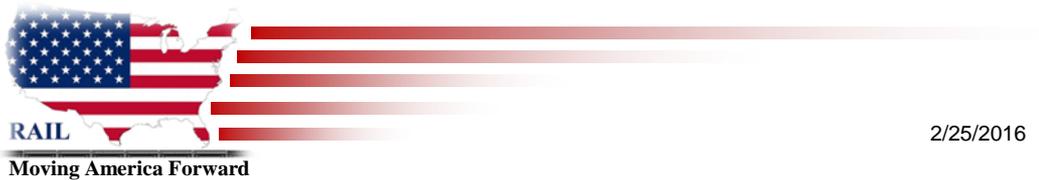
Email: [RsisRXIUpdates@dot.gov](mailto:RsisRXIUpdates@dot.gov)

Phone: (888) 372-9393

# References

- [Safety Data Public Website](#)
  - [Grade Crossing Inventory System](#)
  - [FRA Guide For Preparing U.S. DOT Crossing Inventory Forms](#)
  - [FRA Web User Guide Grade Crossing Inventory System \(GCIS\) v2.0](#)
  - [FRA Instructions for Electronic Submission of Grade Crossing Inventory Data v2.0](#)
  - [FRA Data Migration Strategy Grade Crossing Inventory System \(GCIS\)](#)
- Note: Many of these reference materials can be found directly within the Grade Crossing Inventory System under the Help tab

# Q&A Session



2/25/2016



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