Crossing Data Review and Approval for Advance Warning Signs and LRS Milepost

Revision Summary

Revision Date	Document Version #	Revision Class	Summary
05/2018	1.0	Major	Initial Availability
04/30/2020	2.0	Minor	In the Footer, Updated Release Version and added Release Date of Current Version
02/23/2021	3.0	Minor	In the Footer, Updated Release Version and added Release Date of Current Version

Release v.2.8.0.0 provides a tool for users to review and approve corrections to data for the current and historical crossing records associated with the following fields on the *Update Crossings* tab:

- Part V.6 LRS Milepost
- Part III.2.D Advance Warning Signs

This review is necessary because data in these fields may have become corrupted inadvertently. The data must be reviewed and corrected in the GCIS application. Corrections cannot be made in the API or the Excel upload.

> **Note: The data corruption may have occurred when *any user* made *any update* to a crossing, regardless of whether the update was intended to modify the data in the Advance Warning Signs or LRS Milepost fields.** For example, if a Railroad user made an update to Part I.5 Street/Road Name, data in Part V.6 LRS Milepost or Part III.2.D Advance Warning Signs may have become corrupted, even though the user did not make any changes to the field(s).

The FRA has identified records that may have become corrupted. FRA's Chief Counsel has indicated that the FRA cannot make these changes without review and approval from the State and Railroad users. This is because the FRA cannot confirm that the data was corrupted; it may have been purposely changed by a user. State users will be prompted to review and approve corrections for Part V.6 and Part III.2.D for public crossings; Railroad users will be prompted for private crossings. These updates will be made available to the agency based on the type of crossing (public or private), and not based on which type of user made the update (Railroad or State).

When users log into the GCIS web application and click on the *Update Crossings* tab, they will see a new section entitled *Data Revision Review and Approval*. The page will display one, two or three grids of data for review and action. If users click the *Skip for Now* button at the bottom of each grid, the grid(s) will be removed and users can proceed with an update. However, users will continue to see the grids each time

they log in and click on the *Update Crossings* tab until all crossing data in question has been verified and corrected.

Using the Grids

There are three grids: *Part V.6 LRS Milepost Information*, *Part III.2.D. Advance Warning Signs Information* and *Part III.2.D. Advance Warning Signs Migrated Records.* Users will only view grids if their Railroad or State agency has potentially corrupted data to review and correct.

Each grid displays the following columns:

Crossing:	The crossing ID for the data in question
Revision Date:	The date the value displayed in the Record Value field for this row was added to the database
Pre-Change Value:	The data that was in the database prior to the potential corruption
Record Value:	The data that was saved on the Revision Date
Published Value:	The data that is in the current published record

Verifying the Data

1. For each record in the grid, users should ask themselves the following question:

   "For the Revision Date, which of the three values (pre-change, record, or published) is correct?"

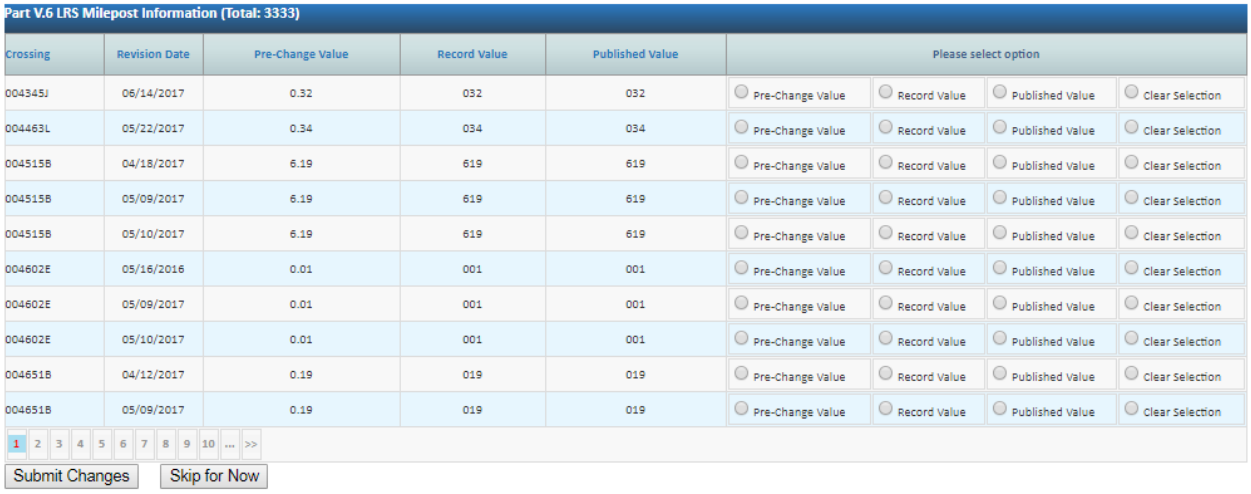
2. Indicate the answer by selecting the radio button corresponding to the desired response: *Pre-Change Value, Record Value or Published Value*. If you want to deselect a value, select *Clear Selection* for a record.
3. Complete as many records as desired.
4. Click *Submit Changes*. The changes will be registered in the database and the rows will be removed from the grid. Once all records in a grid have been completed, the grid will no longer appear when users log in and select the *Update Crossing* tab.
5. Users can continue to resolve records in the same grid, or move on to records in the next grid (if there is more than one grid associated with the Agency).
6. To resolve the remaining records later, select *Skip for Now*.
7. To view the *Update Crossing* function, select *Skip for Now* in each grid. The grids will remain hidden for the remainder of the session, but will display each time a user logs in until resolved.

Part V.6 LRS Milepost Information Grid

The LRS Milepost review and correction is the simplest to review and correct. The data became corrupted when values containing a decimal had the decimal removed. For example, an LRS Milepost value of "0.12" was corrupted and became "012".

> **Recommendation:** The FRA recommends selecting the Pre-Change Value, which contains a decimal point, in most cases. However, this is just a suggestion and the user should review and select the most appropriate value for each record.

Updating a Crossing Record


Part V.6 LRS Milepost Information (Total: 3333)

Crossing	Revision Date	Pre-Change Value	Record Value	Published Value	Please select option
004345J	06/14/2017	0.32	032	032	Pre-Change Value / Record Value / Published Value / Clear Selection
004463L	05/22/2017	0.34	034	034	Pre-Change Value / Record Value / Published Value / Clear Selection
004515B	04/18/2017	6.19	619	619	Pre-Change Value / Record Value / Published Value / Clear Selection
004515B	05/09/2017	6.19	619	619	Pre-Change Value / Record Value / Published Value / Clear Selection
004515B	05/10/2017	6.19	619	619	Pre-Change Value / Record Value / Published Value / Clear Selection
004602E	05/16/2016	0.01	001	001	Pre-Change Value / Record Value / Published Value / Clear Selection
004602E	05/09/2017	0.01	001	001	Pre-Change Value / Record Value / Published Value / Clear Selection
004602E	05/10/2017	0.01	001	001	Pre-Change Value / Record Value / Published Value / Clear Selection
004651B	04/12/2017	0.19	019	019	Pre-Change Value / Record Value / Published Value / Clear Selection
004651B	05/09/2017	0.19	019	019	Pre-Change Value / Record Value / Published Value / Clear Selection

1 2 3 4 5 6 7 8 9 10 ... >>

Submit Changes Skip for Now

In the screenshot above, the user is presented with an update that was made on 6/14/2017 to crossing 004345J. The data in the LRS Milepost field was either (1) changed to "032" or (2) already contained a value of "032" and another update to the record was made. This value is the Record Value. Prior to any potential corruption (Pre-Change Value), a "0.32" had been stored in this field. The current Published value for the crossing also contains a "032."

To resolve this case, users must answer the following question: On 6/14/2017, which was the correct value for the field: (1) the data displayed in the Pre-Change Value field, (2) the data displayed in the Record Value field or (3) the data displayed in the Published Value field? Please see the *Verifying the Data* section for selection and correction instructions.

Updating Multiple Records for a Crossing

In the screenshot above, the user is presented with updates that were made on 4/18/2017, 5/9/2017 and 5/10/17 to crossing 004515B. The Pre-Change value is "6.19" and the Record and Published values are "619." The presence of three records means that the data was changed from "6.19" to "619" and then had subsequent updates to the record. This does not mean the data was changed to "619" three times. It means that some value in a data field of the record was changed, and that record continued to contain the corrupted value of "619." Users will be asked to review and correct the data for each time a record was updated. Additionally, if the crossing is updated another time, then a new record will be added to the grid until all corrections for that crossing are reviewed and corrected. For example, if no changes are selected on the grid for 004515B, and it is updated on 6/1/18, then a fourth record will be

added to the grid. Please follow the guidance in *Updating a Crossing Record* to review and correct each record.

Part III.2.D. Advance Warning Signs Grids

There are two different types of potential data corruption related to the Part III.2.D.Advance Warning Signs fields. Therefore, users may see two grids of Advance Warning data to be verified and corrected:

- The first category concerns data that is stored in the six W10-X fields and the "None" indicator (referred to as the Advance Warning Signs Information).
- The second category concerns data that was migrated from the previous GCIS application (referred to as the Advance Warning Signs Migrated Records).

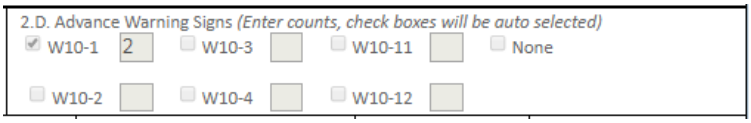
Part III.2.D. Advance Warning Signs Information Grid

The Advance Warning Signs Information grid contains records where value(s) of signs were likely and inadvertently zeroed out.

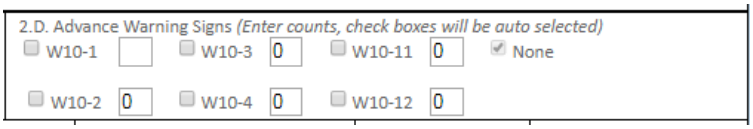
> **Recommendation:** The FRA recommends selecting the Pre-Change Value in most cases. However, this is just a suggestion and the user should review and select the most appropriate value for each record.

There are multiple scenarios for this grid, so please contact the FRA if you have any questions that this document does not answer.

For a crossing with W10-1 = "2", the Pre-Change Value will display in the grid as `1 (2) 2 (0) 3 (0) 4 (0) 11 (0) 12 (0)` The data would have appeared on the form as such:



For a crossing where the values of Advance Warning were zeroed out inadvertently, the Record and Published Value will display in the grid as `1 (0) 2 (0) 3 (0) 4 (0) 11 (0) 12 (0)`. The data appears on the form as such:



Users must review records and make the appropriate updates.

Updating a Crossing Record

Part III.2.D. Advance Warning Signs Information (Total: 2)

Crossing	Revision Date	Pre-Change Value	Record Value	Published Value	Please select option			
372379R	09/26/2017	1 (2) 2 (0) 3 (0) 4 (0) 11 (0) 12 (0)	1 (0) 2 (0) 3 (0) 4 (0) 11 (0) 12 (0)	1 (0) 2 (0) 3 (0) 4 (0) 11 (0) 12 (0)	Pre-Change Value	Record Value	Published Value	Clear Selection
372379R	03/08/2018	1 (2) 2 (0) 3 (0) 4 (0) 11 (0) 12 (0)	1 (0) 2 (0) 3 (0) 4 (0) 11 (0) 12 (0)	1 (0) 2 (0) 3 (0) 4 (0) 11 (0) 12 (0)	Pre-Change Value	Record Value	Published Value	Clear Selection

Submit Changes Skip for Now

In the screenshot above, the user is presented with an update that was made on 9/26/2017 to crossing 372379R. The data values in the Advance Warning Sign field were either (1) all changed to "0" or (2) all already contained a value of "0" and another update to the record was made. This value is the Record Value. Prior to any potential corruption (Pre-Change Value), a "2" had been stored in the Advw10_1 field. The current Published value for the crossing also contains values "0."

To resolve this case, users must answer the following question: On 9/26/2017, which was the correct value for the field: (1) the data displayed in the Pre-Change Value field, (2) the data displayed in the Record Value field or (3) the data displayed in the Published Value field? Please see the *Verifying the Data* section for selection and correction instructions.

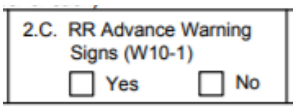
Updating Multiple Records for a Crossing

In the screenshot above, the user is presented with updates that were made on 9/26/2017 and 3/8/2018 to crossing 372379R. The Pre-Change contains a value of "2" for Advw10_1 and the Record and Published values all contain "0." The presence of two records means that the data was changed from containing values to zeroes and then had subsequent updates to the record. This does not mean the data was changed two times. It means that some value of the record was changed, and that record continued to contain the corrupted values of "0." Users will be asked to review and correct the data for each time a record was updated. Additionally, if the crossing is updated another time, then a new record will be added to the grid until all corrections for that crossing are reviewed and corrected. For example, if no changes are selected on the grid for 372379R, and it is updated on 6/1/18, then a third record will be added to the grid. Please follow the guidance in *Updating a Crossing Record* to review and correct each record.

Part III.2.D. Advance Warning Signs Migrated Records Grid

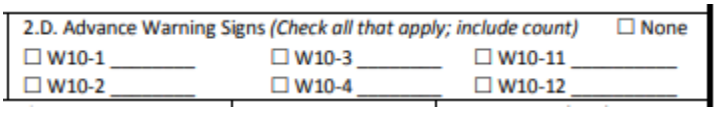
An updated U.S. DOT Crossing Inventory Form (form 6180.71) was released on 3/7/15. A new version of the GCIS application was released along with that form. In conjunction with that release, data from the previous form was migrated to accommodate the new form.

Old form:



2.C. RR Advance Warning Signs (W10-1)
☐ Yes ☐ No

New form:



2.D. Advance Warning Signs *(Check all that apply; include count)* ☐ None
☐ W10-1 _____ ☐ W10-3 _____ ☐ W10-11 _____
☐ W10-2 _____ ☐ W10-4 _____ ☐ W10-12 _____

If the pre-2015 form had RR Advance Warning Signs = “Yes”, then the Advance Warning value for the migrated record was “1.” If the pre-2015 form had RR Advance Warning Signs = “No”, then the Advance Warning value for the migrated record was blank. The old form indicated the presence of a W10-1 sign; the new form indicates the presence and count of signs.

Migrated records with RR Advance Warning Signs (W10-1) = “Yes” have a value of “1” for Advance Warning in the new GCIS database. The corrupted records may have inadvertently changed the “1” to a “0” or a blank, which would indicate the RR Advance Warning Signs (W10-1) = “No” or a non-response, instead of a “Yes.”

> **Recommendation:** The FRA recommends selecting the Pre-Change Value, which has a value of “1”, in most cases. However, this is just a suggestion and the user should review and select the most appropriate value for each record.

Part III.2.D.Advance Warning Signs Migrated Records (Total: 822)

Crossing	Revision Date	Pre-Change Value	Record Value	Published Value	Please select option
004219P	05/18/2017	1	0	0	Pre-Change Value | Record Value | Published Value | Clear Selection
004229V	05/18/2017	1	0	0	Pre-Change Value | Record Value | Published Value | Clear Selection
004229V	05/18/2017	1	0	0	Pre-Change Value | Record Value | Published Value | Clear Selection
004386N	05/22/2017	1	0	0	Pre-Change Value | Record Value | Published Value | Clear Selection
004463L	05/22/2017	1	0	0	Pre-Change Value | Record Value | Published Value | Clear Selection
004515B	04/18/2017	1	0	0	Pre-Change Value | Record Value | Published Value | Clear Selection
004515B	05/09/2017	1	0	0	Pre-Change Value | Record Value | Published Value | Clear Selection
004515B	05/10/2017	1	0	0	Pre-Change Value | Record Value | Published Value | Clear Selection
004656K	05/22/2017	1	0	0	Pre-Change Value | Record Value | Published Value | Clear Selection
004656K	05/22/2017	1	0	0	Pre-Change Value | Record Value | Published Value | Clear Selection

1 2 3 4 5 6 7 8 9 10 ... >>

Submit Changes Skip for Now

Updating a Crossing Record

In the screenshot above, the user is presented with an update that was made on 5/18/2017 to crossing 004219P. The data in the Advance Warning Sign field was either (1) changed to “0” or (2) already contained a value of “0” and another update to the record was made. This value is the Record Value. Prior to any potential corruption (Pre-Change Value), a “1” had been stored in this field. The current Published value for the crossing also contains a “0.”

To resolve this case, users must answer the following question: On 5/18/2017, which was the correct value for the field: (1) the data displayed in the Pre-Change Value field, (2) the data displayed in the Record Value field or (3) the data displayed in the Published Value field? Please see the *Verifying the Data* section for selection and correction instructions.

Updating Multiple Records for a Crossing

In the screenshot above, the user is presented with updates that were made on 4/18/2017, 5/9/2017 and 5/10/17 to crossing 004515B. The Pre-Change value is “1” and the Record and Published values are “0.” The presence of three records means that the data was changed from “1” to “0” and then had subsequent updates to the record. This does not mean the data was changed to “0” three times. It means that some value of the record was changed, and that record continued to contain the corrupted

value of “0.” Users will be asked to review and correct the data for each time a record was updated. Additionally, if the crossing is updated another time, then a new record will be added to the grid until all corrections for that crossing are reviewed and corrected. For example, if no changes are selected on the grid for 004515B, and it is updated on 6/1/18, then a fourth record will be added to the grid. Please follow the guidance in *Updating a Crossing Record* to review and correct each record.