



FMIS 5.0

State Preparation Guide

FHWA IT Services

11/06/2013

Contents

Points of Contact	4
Current Bill	4
Other FMIS 5.0 Topics	4
IT Services Project Managers	4
Introduction	5
Audience	5
Future changes to this document.....	5
Basis for Adding Geospatial Reference to Project Detail	5
Basis for Placing NBI Number on Project Detail	6
State Preparation Steps for FMIS Modernization.....	7
Preparation for Direct Key of Project Agreement data using FMIS screens	7
Preparation for EDS Upload to FMIS.....	7
Preparation for EDS Download of Project Data from FMIS.....	8
State Preparation for Current Bill Upload.....	9
Project Agreement Process Overview	10
Project Agreement Change Summary.....	11
Data Change Summary	11
Geospatial Capabilities.....	14
Considerations	14
Requirements.....	14
Special Cases.....	20
Geospatial Categories for Improvement Types.....	22
National Bridge Inventory (NBI) Relocation instructions.....	24
New EDS File Format.....	25
Project Data Upload Format	25
FMIS Upload File XML Tags.....	28
Projects Tag Elements Description	30
RecipientProjectNumbers Tag Elements Description	31
ProjectGroups Tag Elements Description	31

RelatedProjects Tag Elements Description.....	31
UserDefinedFields Tag Elements Description	32
Signatures Tag Elements Description.....	32
Details Tag Elements Description.....	32
Locations - GIS Tag Elements Description.....	33
Locations -NonGIS Tag Elements Description	33
Attributes Description.....	34
FMIS Upload File Examples	34
[1] Add Project.....	34
[2] Modify Project.....	35
[3] Related Projects, State Project Numbers & Special Project Groups.....	37
[4] Nullifying a field	37
[5] Modifying a project that already has State signature(s)	38
[6] Convert AC Funds Scenarios	38
[7] Project Detail Locations (GIS & Non-GIS)	41
[8] Withdrawing a project or details	44
[9] Reestablish the project or details	45
[10] Deleting a project.....	45
[11] Closing a project.....	46
Error Message Format	46
Project Data Download Format	48
Request File Format.....	48
FMIS Download File XML Tags.....	49
Current Bill Change Summary	53
Data File Upload	53
Data identification and categorization	53
New Current Bill File Format.....	54
Current Bill Data Upload Format.....	54
Example of an upload file	55
Current Bill Response File Format.....	55
Current Bill Error File Format	56
Appendix A – List of Valid Codes.....	57

Functional System	57
General Ownership	57
GIS Omission Justification.....	57
Project Oversight.....	57
Project Type.....	58
Relationship Type.....	58
Recipient	58
Urban or Rural	59
Signature Types.....	60
System Code	60
Urban Codes.....	60
Congressional Districts.....	74
Appendix B – NBI Number Relocation Spreadsheet	85

Points of Contact

Current Bill

Please email: CurrentBillSupport@dot.gov

Rochelle Zellars-Crawford

(202) 366-2862

rochelle.zellars-crawford@dot.gov

Other FMIS 5.0 Topics

Please email: FMIS-5-Support@dot.gov

Joy K. Kelly

(202) 366-2922

joy.k.kelly@dot.gov

Erin Robertson

(202) 366-4814

erin.robertson@dot.gov

IT Services Project Managers

Phil Troutman

(202) 366-4669

phil.troutman@dot.gov

Jim Lieu

(202) 493-0104

Jim.Lieu@dot.gov

Introduction

The purpose of this document is to provide States with all information that is required in order to prepare for the FMIS 5.0 release, which will be implemented for the start of FY 2015. As such, the scope of this document includes the following topics:

- Project agreement data changes verses FMIS-4 (current production FMIS)
- Instructions for relocating National Bridge Inventory (NBI) number from Project Header to the Detail line
- Electronic Data Sharing (EDS) instructions required for States to upload data to and download data from FMIS.
- Current Bill instructions required for States to send reimbursement requests to FMIS and to approve them.

Audience

This document is intended for use by all States. Sections which discuss Electronic Data Sharing (EDS) should be of interest to States which upload or download project agreement data from FMIS, or plan to do so in the future.

This document also should be of interest to Division personnel who have a FMIS oversight role.

Future changes to this document

This document is subject to change as the FMIS 5.0 project progresses. If a revision to the document becomes necessary, it will be distributed to the States via the FHWA Division offices. The latest version of the document can be accessed via the FMIS modernization link on the FMIS User News and Information web site (FUNI). The FUNI site is available as an option on the Help menu in production FMIS.

The purpose of revisions will be to improve the document's usability in response to comments from the field, as well as to make technical changes, which are expected to be minor if they occur.

Basis for Adding Geospatial Reference to Project Detail

The FHWA is issuing this guidance to clarify the type of information needed from the States to satisfy the requirements of 23 CFR Part 630.108. 23 CFR Part 630.108(b) states that, "The STD may develop the project agreement in a format acceptable to both the STD and the FHWA provided the following are included: (1) A description of each project location including State and project termini; (2) The Federal-aid project number; (3) The work covered by the agreement."

Pursuant to the aforementioned regulation, each State DOT must now submit geospatial data [for each project location]. The collection of geospatial data is necessary as USDOT transitions to the performance and outcome based-program created by MAP-21. Geospatial project location facilitates performance based management in the following ways:

- It allows analysis of relationships between safety-related investment and accident incidence down to the level of the individual highway corridor.

- It allows analysis of relationships between infrastructure spending and roadway performance down to the level of the individual highway corridor.
- Data quality regarding the location of infrastructure investments is improved, which improves the accuracy of performance measures which rely on such data. Location and roadway related data will be derived on the State's behalf from route ID and beginning and ending mile points using a standard, automated methodology. This is in contrast to the current situation, where states provide such data by various methods without any verifiable linkage to the physical location of the project. Project Statistics that will be automatically derived rather than State-supplied include:
 - County
 - Congressional district
 - Urbanized Area
 - Functional System
 - Ownership
 - System Code
 - Urban or Rural

The collection of geospatial data is consistent with 23 CFR Part 630.108(b)(1) as this type of data is part of the description of the project location which includes the project termini. Additionally, geospatial data also fits the requirements of the "work covered by the agreement" as the project agreement for each Federal-aid project comprises spending and work data for individual roadways which can be readily discerned with the addition of the geospatial data.

Basis for Placing NBI Number on Project Detail

The Department of Transportation Office of the Inspector General (OIG) report number MH-2010-039, dated January 14, 2010, identified weaknesses in FHWA systems' ability to trace funding to individual bridges. The report made recommendations to address the weaknesses, to which, the FHWA Administrator concurred.

Footnote 16 of the OIG report correctly states that the design of current FMIS was not intended to attribute expenditures or obligations to individual bridges. As such, FMIS allows multiple bridges to be tied to the same project, improvement type, and program code, without providing the means to determine the proportion of project funds that go to one bridge versus another.

The FMIS 5.0 addresses the above audit finding by placing NBI number on the project detail line, where each NBI number can be linked directly to obligations.

State Preparation Steps for FMIS Modernization

A State may choose to use any combination of the following FMIS capabilities in accordance with its needs. The narrative below recommends general steps that States may need to perform in preparation for using one of the following capabilities:

- Direct Key of Project Agreement data using FMIS screens
- EDS Upload to FMIS
- EDS Download From FMIS
- Current Bill Upload to FMIS

Preparation for Direct Key of Project Agreement data using FMIS screens

Direct Key refers both to States that enter project data into FMIS, as well as States where Division personnel enter project data on the States behalf. Such States would need to take the following steps plus any other steps that are unique to their location:

1. Review the following sections of this document to assess requirements:
 - a. Project Agreement Process Overview
 - b. Project Agreement Change Summary
 - c. National Bridge Inventory (NBI) relocation instructions
2. Assess the impact of the project agreement changes on State software and business processes. For example, the impact of adding geospatial data to project detail lines may include:
 - a. Staff with geospatial knowledge may need to contribute location data to the project agreement.
 - b. Documents describing how to supply data to FMIS may need to be changed.
 - c. The State's repository of project descriptions may need to be changed to carry the geospatial data
3. Revise impacted documentation, procedures and software as needed.
4. If needed, provide an NBI relocation spreadsheet per the (NBI) relocation instructions.
5. Verify successful preparation by engaging revised software, revised written procedures, business processes, and personnel in entering a sample of your State's project data into the FMIS modernization test environment (available in February/March 2014). Revise and re-verify as needed.
6. Report successful preparation or unresolved issues with direct key of projects as well as NBI relocation no later than 06/02/2014. Report to your Division as well as FMIS-5-Support@dot.gov.

Preparation for EDS Upload to FMIS

This section covers preparation steps for upload of project data from the State to FMIS as well as processing of messages that result from successful or erroneous upload. States that will utilize EDS upload need to take the following steps plus any other steps that are unique to their location:

1. Review the following sections of this document to assess requirements
 - a. Project Agreement Process Overview
 - b. Project Agreement Change Summary
 - c. National Bridge Inventory (NBI) relocation instructions
 - d. New EDS File Format
 - e. Appendix A - List of Valid Codes
2. Assess the impact of the project agreement changes on State software and business processes. Examples: The possible impacts of adding geospatial data to project detail lines may include:
 - a. Staff with geospatial knowledge may need to contribute location data to the project agreement.
 - b. Documents describing how to supply data to FMIS may need to be changed.
 - c. The State's repository of project descriptions may need to be changed to carry the geospatial data
 - d. EDS software will need to be changed to supply data in XML format
 - e. EDS software may need to be changed to interact with the State's geospatial repository.
3. Revise impacted documentation, procedures and software as needed.
4. If needed, provide an NBI relocation spreadsheet per the (NBI) relocation instructions.
5. Verify successful preparation by engaging revised software, written procedures, business processes, and personnel in uploading a sample of your State's project data into the FMIS modernization test environment (available in February/March 2014). The sample transactions should be as representative as possible of the various types project transactions that your State will be processing in FY 2015. Revise and re-verify as needed.
6. Report successful preparation or unresolved issues with the EDS upload as well as NBI relocation no later than 06/02/2014. Report to your Division as well as the FMIS-5-Support@dot.gov .
7. No State can send files electronically to the production environment before a Memorandum of Understanding [MOU] has been approved by both the State and the FMIS system owner. FHWA IT Services will follow up with EDS States during the summer of 2014 to provide guidance in regard to the content of the MOU, and to assure that an approved MOU is place for each EDS upload State.

Preparation for EDS Download of Project Data from FMIS

This section covers preparation steps for download of project data from FMIS to the State. States that will utilize EDS download need to take the following steps plus any other steps that are unique to their location:

1. Review the following sections of this document to assess requirements:
 - a. Project Agreement Process Overview
 - b. Project Agreement Change Summary
 - c. Electronic Data Sharing Download to FMIS
 - d. Project Data Download Format
 - e. Appendix A - List of Valid Codes

2. Assess the impact of the project agreement changes on State software and business processes. Example: EDS download software will need to be changed to process data in XML format
3. Revise impacted documentation, procedures and software as needed.
4. Verify successful preparation by engaging revised software, revised written procedures, business processes, and personnel in downloading a sample of your State's project data from the FMIS modernization test environment (available in February/March 2014). The sample transactions should be as representative as possible of the various types project transactions that your State will be processing in FY 2015. Note that Division signature personnel may be needed to assist with these tests, since EDS download only includes projects that have been fully signed by the Division.
5. Report successful preparation or unresolved issues with the EDS download no later than 06/02/2014. Report to your Division as well as, the FMIS-5-Support@dot.gov .

State Preparation for Current Bill Upload

This section covers preparation steps for upload of current bill from the State to FMIS. States need to take the following steps plus any other steps that are unique to their location:

1. Review the following sections to assess requirements:
 - a. Current Bill Change Summary
 - b. Current Bill Data Upload Format
 - c. Current Bill Response File Format
 - d. Current Bill Error File Format
2. Assess the impact of the current bill project agreement changes on State software. Example: Current bill software will need to format files in pipe-delimited format rather than fixed format.
3. Verify successful preparation by engaging revised software, written procedures, business processes, and personnel in uploading a sample of your State's current bill data to the FMIS modernization test environment (available in February/March 2014). The sample transactions should be as representative as possible of the various types of current bill transactions that your State will be processing in FY 2015.
6. Report successful preparation or unresolved issues with the current bill upload no later than 06/02/2014. Report to your Division as well as CurrentBillSupport@dot.gov .

Project Agreement Process Overview

The FMIS 5.0 Project agreement process follows the same basic steps as that of FMIS 4.0:

- A Pending project is created by entering project agreement data using FMIS screens or transmittal of the same via Electronic Data Sharing (EDS). The pending project may be a new agreement or a modification of an existing agreement.
- Review and signature of the pending project by one to three State signatories.
- Review and signature of the pending project by one to three Division signatories.
- Obligations associated with the project are approved following final Division signature, and the pending project becomes a "Current" project.

Although the FMIS 5.0 basic project agreement process is unchanged from FMIS 4.0, there are changes to the required statistics for each agreement, which are described in the Project Agreement Change Summary below.

Project Agreement Change Summary

Purpose: The purpose of this section is to describe all changes that will be made to the project agreement data in FMIS as a result of the FMIS modernization. Changes will be implemented for the start of FY 2015. This section consists of the Data Change Summary, followed by a Geospatial Capabilities section. The Geospatial Capabilities section provides detailed rules for defining project detail location using each State’s Linear Reference System (LRS).

Data Change Summary

	Data Change Description	Background
1.	“State” has been relabeled to be “Recipient”.	This change was made to accommodate a possible increase in Federal –Aid recipients that are not State Departments of Transportation.
2.	<p>Project Detail Location shall be carried on the project detail line as Route ID from the State’s Linear Reference System (LRS), along with beginning and ending mile points for that Route ID. Multiple Route IDs are allowed within the same detail line.</p> <p>Validation of Route ID and mile points will rely on geospatial data that is submitted to the Office of Policy on an annual basis for Highway Performance Monitoring Systems (HPMS) purposes, as well as Metropolitan Planning Area “shape” files that are compiled by the Office of Planning.</p>	See Geospatial Capabilities for complete details.
3.	<p>NBI structure number shall be relocated to the project detail line.</p> <p>Where possible, relocation shall happen automatically as project agreement data is migrated to the new system.</p> <p>NBI structure numbers cannot automatically be relocated to project details if a project has multiple NBI numbers with the same improvement type and program code. States shall have the option to provide migration instructions for such projects, or to relocate NBI number if and when such projects are modified using the new system.</p>	This change allows a bridge to be associated with obligation amounts for accurate reporting of investment in individual bridges.

4.	Environmental decision and decision date will be dropped from FMIS. Instead of collecting these values, FMIS 5.0 will prompt first-level signatories at the State and Division to confirm that the environmental decision process has been followed, and all required steps are complete. The prompt will appear for construction and right-of-way projects	Environmental decision data that is currently held in FMIS is duplicative of FHWA’s Project And Program Action Information System (PAPAI), which is the appropriate repository for environmental data.
5.	Remove Inventory Route Number and associated beginning and ending mile points from the Project Header.	This item and its associated mile points were intended to support a federal Linear Reference System, which is now obsolete. The current approach is for each State to use their own LRS and mile points.
6.	Increase the max length of the Project Description to 2000 characters	Addresses user survey requests for a longer description.
7.	A new “Project Title” element shall be added. This is a required value on all projects. Project description shall be placed in both project title and project description when pre-existing projects from FMIS 4 are migrated to FMIS 5.0. This way, all projects will have a title.	Addresses user survey requests for a project title.
8.	FTA indicator shall be removed from detail lines	This item is obsolete. FTA Obligations are no longer held as detail lines within FMIS projects.
9.	Data from FMCSA projects shall not be accessible.	FMCSA is no longer an active user of FMIS.
10.	All FMCSA related data elements shall be removed from the application. These include the OMC indicator on the program code table, as well as the FMCSA date on the project summary table in production FMIS.	FMCSA is no longer an active user of FMIS.
11.	Remove Standard Place Code from project header:	This standard was withdrawn 02/05/2008. Federal register reference: 70FR/6623

<p>12.</p>	<p>Changes to State Defined Fields</p> <ul style="list-style-type: none"> • These items are now called “Recipient Defined Fields” to allow for the possibility that future grantees will be non-state organizations. * • Recipients (States) can define date fields (must be a valid date or null). Up to 3 date fields can be defined on the project header, and up to 3 on the detail line. • Text fields can be designated to be Boolean (valid values are Yes, No, or null). 	
<p>13.</p>	<p>Estimated Construction Date will be converted into a Recipient Defined Field on the project header for all States. Any existing values for Estimated Construction Date will be relocated to the “Estimated Construction Date” defined field, prior to opening FMIS 5 for the start of FY 2015.</p>	<p>Estimated Construction Date is not needed as part of the “standard” elements of the project agreement, however many States reported that this item contains valuable information. For this reason, it has been relocated to the Recipient Defined Fields.</p>
<p>14.</p>	<p>Changes to Division Defined Fields:*</p> <ul style="list-style-type: none"> • Divisions can define date fields (must be a valid date or null). Up to 2 date fields can be defined on the project header, and up to 2 on the detail line. • Text fields can be designated to be Boolean (valid values are Yes, No, or null). 	
<p>15.</p>	<p>FHWA Area will be converted into a Division Defined Field on the project detail for all Divisions. Any existing values for FHWA Area will be relocated to the “FHWA Area” defined field, prior to opening FMIS 5 for the start of FY 2015.</p>	<p>FHWA Area is not needed as part of the “standard” elements of the project agreement, however many Divisions reported that this item contains valuable information. For this reason, it has been relocated to the Division Defined Fields.</p>
<p>16.</p>	<p>102 Expenditures has been renamed “ROW Revolving Funds”.</p>	<p>The new name is more descriptive of the purpose of the field.</p>

<p>17. FMIS 5 has two-way related projects. For example, if project B is added as a related project for project A, FMIS will automatically add project A as a related project for project B. Only project A has to be modified to establish the two-way relationship.</p>	<p>This is in contrast to FMIS 4, where a State has to modify both project A and project B to have the two-way relationship.</p>
--	--

* The file formats in this document refer to “User Defined Fields” rather than recipient or Division defined fields. The reason is that the User Defined Fields XML tag can contain both recipient and Division defined fields when project data is downloaded. The upload file format also refers to User Defined Fields. This was done for consistency with the download format, even though a recipient would never upload a Division defined value.

Geospatial Capabilities

Considerations

1. Accuracy – Geospatial reference data eliminates ambiguity regarding project location
2. Standard Place Code is obsolete - This item was in FMIS as a means to pinpoint project location. Geospatial referencing is the standard means of tracking location related data. FHWA is simply adopting the new industry standard.
3. All states have a Linear Reference System (LRS) so the data is available.
4. The agency is moving toward performance based management, where the investment in a roadway is compared to the roadway’s performance. Such information is then used as the basis for improving the performance of the highway system. As such, the agency’s goal is to track the financial investment down to the roadway.
5. FMIS needs to meet today’s expectations for accuracy, presentation, comprehensive analysis, and reporting.

Requirements

1. The geospatial rules that follow apply both to online FMIS, as well as Electronic Data Sharing (EDS). As such, “EDS” can be used interchangeably with the word “user” anywhere within these geospatial requirements, unless noted otherwise.
2. Geospatial data shall be carried on the project detail line as Route ID, with beginning and ending mile points for that Route ID
3. Route ID shall be defined in accordance with each State’s linear reference system.
4. Mile Points must be valid for the Route ID.
5. Beginning mile point must be < ending
6. **Location** - When geospatial data is on a project detail line, FMIS 5.0 shall derive the following location based data. This contrasts with current FMIS where users provide these values. Note that throughout this document, project detail “location” refers to a unique combination of the following items:
 - a. County
 - b. Congressional district (in States that have congressional districts)
 - c. Urbanized Area (If the Route ID and mile points fall entirely within an Urbanized Area)
 - d. Functional System

- e. Ownership
 - f. System Code
 - g. Urban or Rural
7. **Fund Amounts** – The term “fund amounts” refers to the following amounts throughout this document:
- a. Federal
 - b. State
 - c. AC
 - d. Local
 - e. Non-monetary
 - f. Private
 - g. Other.
8. In general, geospatial data shall be required both for new detail lines as well as for modifications to old detail lines that existed on a Current project prior to implementation of FMIS 5.0, however geospatial data is not required if a detail line fits any of the following exceptions:

Exceptions

	Automatic Exceptions: FMIS automatically recognizes that geospatial data is not required, and allows omission of geospatial data without issuing a warning.	Applicable Details*
a.	Statewide detail lines – This is the only situation where geospatial data is not allowed.	All
b.	Off-roadway – The detail line has an improvement type that commonly occurs off-roadway. The “Geospatial Categories for Improvement Types” section below can be referenced for this and all other exceptions that are driven by improvement type.	All
c.	New construction - The detail line has an improvement type that applies only to new construction.	All
d.	Close or withdrawal - A Close or withdrawal transaction will not force geospatial data to be added, regardless of which data elements were changed on the detail line.	Old only
e.	Fund amounts or location data are not changed - Geospatial data is not required for changes to project detail elements other than fund amounts or location.	Old only
	User-Supplied Exceptions: 1. If no automatic exceptions apply, FMIS will prompt the State to provide justification as to why geospatial data is omitted on a detail line. 2. One or more of the following justifications may be provided by the State. First State and first Division signatories will be prompted to confirm the accuracy of the justification. An EDS State would provide a “GISOmissionJustification” as part of its project upload.	

f.	New Construction – This justification is allowed if the detail line has an improvement type where “New Construction or Off-Roadway is Possible”. The State shall supply this justification for each detail line where it applies.	All
g.	Off-roadway - This justification is allowed if the detail line has an improvement type where “New Construction or Off-Roadway is Possible”. The State shall supply this justification for each detail line where it applies.	All
h.	Prepare for Close – The State may indicate that the project is being modified in preparation for closure as justification for omitting geospatial data. The State shall only have to supply this justification once for the entire project.	Old only
i.	Construction Complete - The State may indicate that the construction phase of the project is complete as justification for omitting geospatial data. This rule is intended to accomodate GARVEE, public-private partnership (PPP), and similar situations. Project completion date must be in the past if it contains a value. The State shall only have to supply this justification once for the entire project.	Old only

*The "Applicable Details" column indicates if the exception applies to old project detail lines only, or all detail lines.

- Old detail lines are those that existed on a Current project prior to implementation of FMIS 5.0.
- All detail lines applies to old lines as well as those that were added to FMIS after implementation of FMIS 5.0.

9. When an old detail line is modified, geospatial data will only be required if all of the following are true:

- Detail location or at least one fund amount has changed.
- The “Geospatial Categories for Improvement Types” table below categorizes the Improvement Type as “On-Roadway”, “New Construction Possible”, “Off-Roadway Possible”
- No “Automatic” or “User Supplied” Exceptions are applicable.

For online input, if geospatial data is required and the user does not supply it, the detail record will be saved with a warning message. If the GIS data is not present by the time of first signature, then the system will present an error message and the signature will not be applied. For EDS submissions, FMIS will reject projects where State signatures are included, and one or more detail lines lack required geospatial data.

10. Geospatial data is allowed on all project detail lines except statewide. Geospatial data is not allowed on statewide detail lines, because they cannot be linked to a specific roadway.
11. When required, geospatial data **must** be present by the time of first State signature
12. An individual detail line may have multiple Route IDs, each with its own set of mile points. FMIS will assign a default "percentage of funds" to each route ID, based on its share of total mileage across all route IDs for the detail line. **Note:** Users can change the percentage of funds for a route ID if the cost per mile is not identical from one roadway segment to the next.

Example: Figure 1 depicts 3 route IDs that are associated with the same detail line. Federal funds on the detail line total \$112,000, and the total mileage across all route IDs is 30. FMIS assigns 2/3 of funds to the first route ID, because it accounts for 20 miles, which is 2/3 of total mileage. The remaining two route IDs each account for 5 miles, and therefore receive 1/6 of funding. Percent of funds for each route ID can be adjusted on-line or via EDS in cases where mileage-based assignment of funds by FMIS is inaccurate.

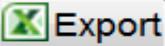
Figure 1

▼ General Detail Information

State AL - Alabama	Project ID 0275(027)
Suffix	State Project #
Version Pending	Program Code LZ2E
Detail # 01	Demo ID <input type="text"/>
Status Active	Improvement Type Preliminary Engineering <input type="button" value="▼"/>
Fund Source LZ2E	Recode 587

▼ Funding

Adv. Construction	\$0.00
Federal Funds	\$112,000.00
State Funds	\$22,400.00
Local Funds	\$0.00
Private Funds	\$0.00
Non-Monetary	\$0.00
Other Funds	\$0.00
Total Cost	\$134,400.00

 				
Route ID	Begin Mile Point	End Mile Point	% Of Federal Funds	Federal Funds <input type="button" value="→"/>
1006012	10.000	30.000	66.67%	\$74,666.67
1006013	20.000	25.000	16.67%	\$18,666.67
1006014	25.000	30.000	16.66%	\$18,666.66
Total				\$112,000.00

13. Route IDs using funds from particular project detail line must be as complete and as specific as possible within the limitations of each States LRS. Examples:
 - a. Dual Carriage Roadway (aka divided highways) - Work occurring on only one-direction of a dual-carriage roadway should reference the Route ID of that direction (if available)
 - b. Ramp – Work occurring on a ramp should reference the Route ID of the ramp (if available)
 - c. One-way Pairs (aka “couplets”) - Each direction of a one-way pair has a separate route ID in the State LRS, therefore separate directions on the same pair should be entered separately on the detail line.
14. Geospatial data for Urban Required (Metropolitan Planning or Urban Attributable) detail lines having federal funds or AC must fall entirely within a Metropolitan Planning Area (MPA).
 - a. Metro Planning detail lines which are Statewide Planning (SWP) or Small Urbanized Area (SUA) are exempt from this requirement.
 - b. Valid MPA boundaries will be based on geospatial shape files compiled by the Office of Planning.
15. For non-urban required detail lines, urbanized area shall be derived from geospatial data in cases where the detail line falls entirely within a single MPA. Urbanized area shall be left blank when geospatial data only falls partially within an urbanized area.
16. If a bridge or tunnel number is included on a detail line, then route ID, and beginning mile point are required except if the line is Statewide, or subject to an “old only” exception (see #8 above). Ending mile point is not required.
17. A single “bridge” detail line can reference multiple bridges, and a single “tunnel” detail line can reference multiple tunnels. When this occurs, a percentage of funds must be user supplied for each bridge or tunnel, so that FMIS can determine the proportion of funding (federal, AC, State, etc.) that is associated with each bridge or tunnel. Figure 2 depicts how a project detail which references 3 bridge numbers might appear. County, Urbanized Area, and Congressional district are derived based on route ID and beginning mile point.

Figure 2

Use Route ID

Route ID

Begin Mile Point

Structure ID

Percentage

[View On Map](#)
[Export](#)
[Print](#)

Route ID	Begin Mile Point	Structure ID	County	Urbanized Area	Congressional District	% Of Federal Funds	Federal Funds	
1006012	10.000	19A3005	Fresno	Bakersfield	18	66.67%	\$89,604.48	...
1244556	25.000	24D6987	Orange	Palm Springs	47	16.67%	\$22,397.76	...
1456666	30.000	3BE75W0	Los Angeles	Hemet	35	16.67%	\$22,397.76	...

18. Route ID and mile points should be provided when an improvement is associated with a roadway, but is not part of the roadway. Example: Route ID and mile points should be provided for landscaping along a stretch of road.
19. Route ID and mile points should refer to the "inventory direction" in cases where an improvement applies to both directions of a dual carriage roadway, and costs are not easily allocated to one direction versus another. Example: Landscaping in the median of a dual-carriage roadway.
20. When geospatial data is optional:
 - a. States should still provide optional geospatial data if it is available. When geospatial data is not available, the States shall specify all project detail location items that are required.
 - b. Users may specify multiple locations for a single detail line. "Location" is defined above. The user must supply a percent of funds for each location.

Special Cases

1. A variance in Cost per mile within the same route ID and improvement type can cause FMIS to inaccurately distribute funding by county, congressional district, and urbanized area. If this is the case, a State or Division can enter the same route ID as multiple segments on the same detail line, with a separate percentage of the detail cost for each segment.
2. Different route IDs within the same detail line may have different cost per mile, and this difference can cause FMIS to distribute project costs inaccurately by county, congressional district, etc. An example would be a "resurfacing" detail line that has one route ID for a three-lane road, and another route ID for a one-lane on-ramp. If costs are not accurately distributed, the user can override the FMIS-assigned percentages of cost.
3. The shape of a roadway can change between annual submittals of GIS data to FHWA. Example: State funded projects can alter the shape of a roadway. Such shape changes can affect how FMIS distributes funding by county, congressional district, and urbanized area. There are no plans to address this situation, because its impact is expected to be infrequent and minor.
4. Considerations for projects where a portion of the project location falls in another State:

- a. Beginning and ending mile points must fall within the State that owns the project. For example, a Kentucky-owned bridge project cannot have an ending mile point in Ohio, even if some small portion of the work is actually taking place in Ohio.
- b. FMIS shall never distribute project costs to locations outside the State that owns a project. Consider a roadway where the beginning and ending mile points both fall within Kansas, but the roadway enters Colorado at one or more points in between. FMIS will allow this situation, but will not distribute any of the project costs to counties and congressional districts within Colorado.
5. Boundaries of congressional districts and urbanized areas can shift over time due to events such as redistricting or census. In addition, new congressional districts can be established or existing districts removed. Such "shifts" will be managed as follows:
6. Reports – Reports will accumulate funds to congressional districts and urbanized areas based on the boundaries that existed as of the time frame of the report. Example: a new congressional district is added on 06/17/2016.
 - a. Any report run for a time frame of 06/17/2016 or later will attribute all funds from within the district to the new district, even if those funds were obligated before the new district was established.
 - b. Any report run for a time frame earlier than 06/17/2016 will attribute funds to the congressional districts that existed as of the report date.
7. Project Versions – Any report or screen that depicts a specific project version shall accumulate funds to congressional districts and urbanized areas that existed as of the date that the project version received final Division signature. Pending projects shall always reflect the boundaries in force as of the current date and time.

Geospatial Categories for Improvement Types

On-Roadway Improvement Types - These improvement types invariably occur on a roadway.
New Construction – Geospatial data is optional because geospatial data is not universally available for new construction.
New Construction or Off-Roadway is Possible – These improvement types may be part of a new construction effort or may correspond to work that is occurring off-roadway. The State can indicate “New Construction” or “Off-Roadway” as justification to omit geospatial data.
Commonly Off Roadway - Geospatial data is optional because this improvement type commonly takes place off-roadway.
Obsolete – Geospatial rules are not applicable for obsolete improvement types. It will not be possible for a detail line with geospatial data to reference an obsolete improvement type.

Improvement Types

Color is used to assign each improvement type to one of the above geospatial categories.

New Construction Roadway	01
4R – Reconstruction (obsolete)	02
4R - Added Capacity	03
4R - No Added Capacity	04
4R - Maintenance Resurfacing	05
4R – Restoration & Rehabilitation	06
4R - Maintenance Relocation	07
Bridge New Construction	08
Bridge Replacement (obsolete)	09
Bridge Replacement - Added Capacity	10
Bridge Replacement - No Added Capacity	11
Bridge Rehabilitation (obsolete)	12
Bridge Rehabilitation - Added Capacity	13
Bridge Rehabilitation - No Added Capacity	14
Preliminary Engineering	15
Right of Way	16

Construction Engineering	17
Planning	18
Research	19
Environmental Only	20
Safety	21
Rail/Hwy Crossing	22
Transit	23
Traffic Management/Engineering - HOV	24
Vehicle Weight Enforcement Program	25
Ferry Boats	26
Administration	27
Facilities for Pedestrians and Bicycles	28
Acquisition of Scenic Easements and Scenic or Historic Sites	29
Scenic or Historic Highway Programs	30
Landscaping and Other Scenic Beautification	31
Historic Preservation	32
Rehabilitation and Operation of Historic Transportation Buildings, Structures, or Facilities	33
Preservation of Abandoned Railway Corridors	34
Control and Removal of Outdoor Advertising	35
Archaeological Planning & Research	36
Mitigation of Water Pollution due to Highway Runoff	37
Safety and Education for Peds/Bicyclists	38
Establishment of Transportation Museums	39
Special Bridge	40
Youth Conservation Service	41
Training	42
Utilities	43
Other	44
Debt Service	45
Design-Build Contract (obsolete)	46
Bridge Preventive Maintenance	47
Bridge Protection	48
Bridge Inspection and Bridge Related Training	49
New Tunnel	50
Tunnel Replacement	51
Tunnel Rehabilitation	52
Tunnel Preventive Maintenance	53

Tunnel Protection	54
Tunnel Inspection and Tunnel Related Training	55
Other Asset Inspection	56
Safety-Non Infrastructure	57
Freight	58
Unknown	99

National Bridge Inventory (NBI) Relocation instructions

This section applies only to bridge projects that pre-exist FMIS 5.0. It provides a method for States to relocate NBI numbers to individual project detail lines as part of migration of pre-existing projects to FMIS 5.0. The following steps will be followed for relocating the NBI number from the project header record to the detail record.

1. **Automatic Conversion:** NBI number will automatically be relocated from the project header to every detail line on the project which has the same improvement type/program code if all conditions bulleted below are met. This will have the effect of tying all funds from each such detail line directly to the NBI number.

Automatic Conversion Conditions:

- The project is an active Current project.
- The improvement type/program code combination for the NBI number is unique among all NBI numbers on the same project.

2. **Relocation Instructions Specified by the State**

- In cases where a project has two or more NBI numbers having the same improvement type/program code combination, automatic conversion is not possible. The States have the option to provide relocation instructions by creating a relocation spreadsheet as described in Appendix B.
- The States will be provided with a listing of all such projects along with the State guidance, and can provide relocation instructions for all, none, or some projects where multiple NBI numbers share the same improvement type/program code.
- NBI numbers will be relocated from the project header to the appropriate detail line(s) based on the relocation spreadsheet provided by the state.
- Any NBI numbers that are not relocated automatically or based on State instructions will be retained in FMIS 5.0. If a State changes a project which contains such NBI numbers, then FMIS will require the State relocate the NBI numbers as part of the changes to the project.

New EDS File Format

Electronic Data Sharing (EDS) refers to the process of managing project data in FMIS via an automatic mechanism. EDS allows State applications to communicate directly with FMIS and upload or download data as an alternative to manually keying it in, which improves accuracy and timeliness, in addition to reducing labor costs.

Any action which the State can perform online can also be performed using EDS. When the State uploads data for a project, FMIS creates a pending project. This pending project can then be reviewed, rejected, modified, signed, un-signed, etc., exactly as if it were entered using the FMIS on-line screens.

FMIS 5.0 will introduce a new file format for project agreement data as well as current bill data. The fixed length file format used by FMIS 4 will be replaced by a XML file format for project agreement data and a pipe-delimited format for current bill data. The new formats will allow for greater flexibility and future updates will have a much lesser impact.

States will no longer transmit files via SFTP. FMIS 5.0 will introduce a web service that will process uploads and downloads requests. This web service can be called by State workstations/server provided that the computer(s) are registered within FMIS.

Project Data Upload Format

Project data upload will be done using an XML file format. Each State-supplied data item is represented by one XML tag. All data items are not required to be present in the XML file being uploaded, as it is permissible to send only data items that have changed plus the necessary key values. The key values to locate a project are *Recipient ID* (which will be the State FIPS code) and the *Federal Project Number*.

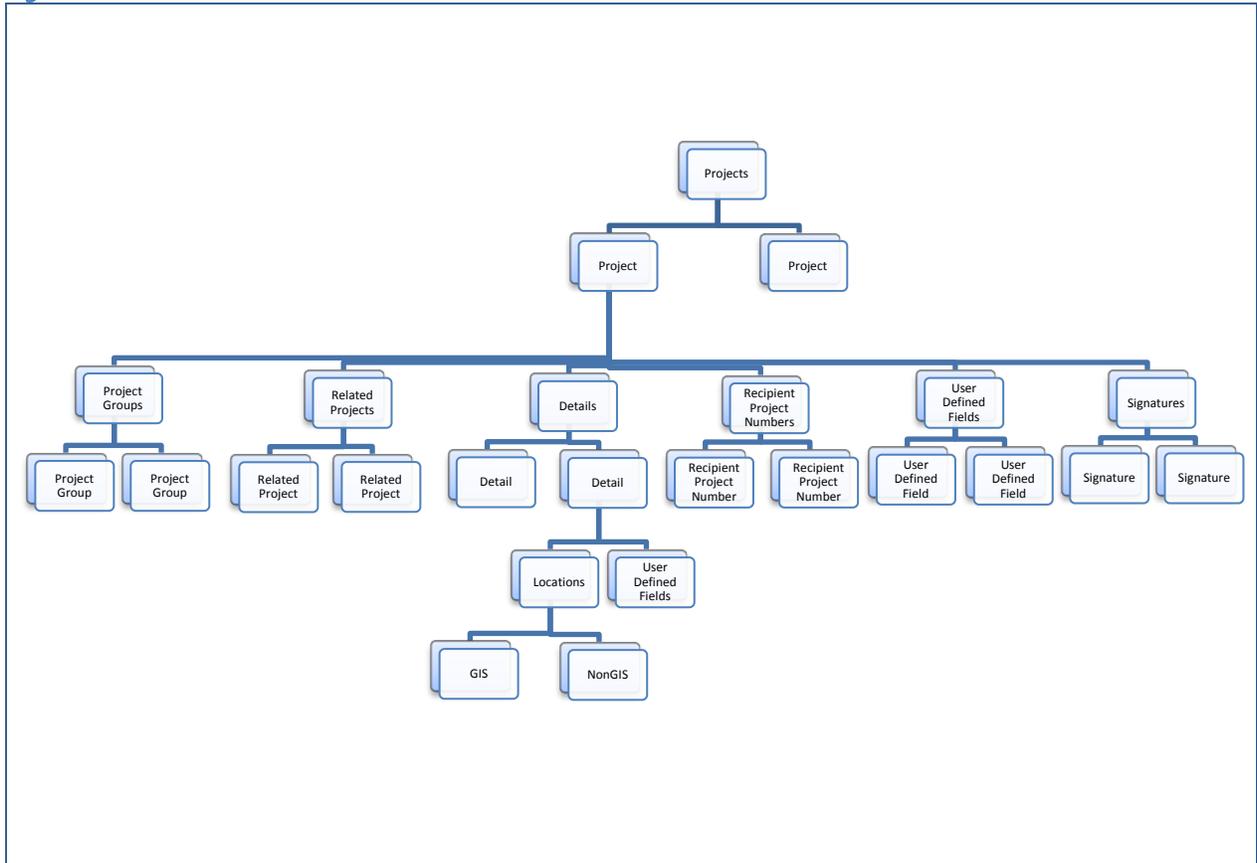
As an example, if the State wanted to change only the description of an existing project, the only tags required in the XML file would be the Recipient ID, Federal Project Number, and Project Description.

```
<?xml version="1.0" encoding="utf-8" ?>
<Projects>
  <Project action="modify">
    <ProgramCode />
    <RecipientID>1</RecipientID>
    <FederalProjectNumber>AL00001</FederalProjectNumber>
    <ProjectDescription>My new description here.</ProjectDescription>
  </Project>
</Projects>
```

Figure 3

The FMIS upload XML file format contains elements that follow a hierarchy as depicted in Figure 4 below.

Figure 4



Projects: This is the root element of the FMIS XML format. It contains a collection of individual <Project> elements. There can be only one <Projects> element per file, since this is the root of the document.

Project: This element is a child of the <Projects> element. This element contains all elements describing the project information portion of the agreement. There can be one or more (1...n) number of <Project> elements within a <Projects> element. For example, if there are 10 project records that need to be updated, then there needs to be 10 <Project> elements.

Details: This element is child of the <Project> element. There can be only one <Details> element per <Project> element. The detail information portion of the agreement is contained inside the <Details> element. It contains a collection of <Detail> elements.

Detail: This element is a child of the <Details> element and corresponds to a single project detail line. This element contains all elements describing the detail information portion of the project agreement. There can be one or more (1...n) <Detail> elements per <Details> element. For example, if there are 4 details records that need to be either updated, created or deleted, then there needs to be 4 <Detail> elements.

Locations: This element is child of the <Detail> element. It contains a collection of <GIS> and/or <NonGIS> elements. There can be zero or one (0...1) <Locations> elements per <Detail> element.

GIS and NonGIS: These elements are children of the <Locations> element. There can be one or more (1...n) elements of these types within each <Locations> element. **Note:** GIS and NonGIS elements are mutually exclusive which means that the Locations element can only contain a GIS or a NonGIS child element but not both.

ProjectGroups: This element is a child of the <Project> element. There can be only one <ProjectGroups> element per <Project> element. It contains a collection of <ProjectGroup> elements.

ProjectGroup: These elements are children of the <Project Groups> element. The element contains the elements describing the Project Group related information of the project. There can be one or more (1...n) <Project Group> elements per <Project Groups> element.

RelatedProjects: This element is a child of the <Project> element. There can be only one <RelatedProjects> element per <Project> element. It contains a collection of <RelatedProject> elements.

RelatedProject: This element is a child of the <RelatedProjects> element. This element contains the elements describing a project that is related to the project defined by the <Project> element and their relationship type. There can be one or more (1...n) <RelatedProject> elements per <RelatedProjects> element.

UserDefinedFields: This element is a child of the <Project> element. There can be only one <UserDefinedFields> element per <Project> element. It contains a collection of <UserDefinedField> elements.

UserDefinedField: (Same as State Defined field in FMIS 4) This element is a child of the <UserDefinedFields> element. This element contains the name and content of a field defined by the recipient in the project header. There can be one or more (1...n) <UserDefinedField> elements per <UserDefinedFields> element.

RecipientProjectNumbers: These elements are children of the <Project> element. There can be only one <RecipientProjectNumbers> element per <Project> element. It contains a collection of <RecipientProjectNumber> elements.

RecipientProjectNumber: This element is a child of the <RecipientProjectNumbers> element. This element contains the Recipient Project Numbers for the project. There can be one or more (1...n) <RecipientProjectNumber> elements per <RecipientProjectNumbers> element.

Signatures: These elements are children of the <Project> element. There can be only one <Signatures> element per <Project> element. It contains a collection of <Signature> elements.

Signature: This element is a child of the <Signatures> element. This element contains the information on a State signature for the project. There can be up to three <Signature> elements per <Signatures> element.

UserDefinedFields (Detail): This element is a child of the <Detail> element. There can be only one <UserDefinedFields> element per <Detail> element. It contains a collection of <UserDefinedField> elements.

UserDefinedField (Detail): This element is a child of the <UserDefinedFields> element. This element contains the name and content of a field defined by the recipient at the Detail level. There can be one or more (1...n) <UserDefinedField> elements per <UserDefinedFields> element.

FMIS Upload File XML Tags

```
<?xml version="1.0" encoding="utf-8" ?>
<Projects>
  <Project action="add|modify|withdraw|close|reestablish|delete">
    <ProgramCode />
    <RecipientID />
    <FederalProjectNumber />

    <RecipientProjectNumbers>
      <RecipientProjectNumber />
    </RecipientProjectNumbers>

    <ProjectType />
    <DUNS />
    <ProjectTitle />
    <ProjectDescription />
    <ProjectCompletedDate />
    <ProjectOversight />
    <STIPReference />
    <IsEREligible />
    <DisasterFiscalYear />
    <DisasterSequenceNumber />
    <ERCode />
    <RecipientDocRemarks />
    <RecipientComments />

    <ProjectGroups>
      <ProjectGroup>
        <GroupCode />
      </ProjectGroup>
    </ProjectGroups>

    <RelatedProjects>
      <RelatedProject>
        <ProgramCode />
        <RecipientID />
        <FederalProjectNumber />
        <RelationType />
      </RelatedProject>
    </RelatedProjects>

    <UserDefinedFields>
      <UserDefinedField>
        <FieldName />
        <ValueText />
        <ValueNumber />
        <ValueDate />
        <ValueBoolean />
      </UserDefinedField>
    </UserDefinedFields>
  </Project>
</Projects>
```

```
<Signatures>
  <Signature>
    <Name />
    <Date />
    <Type />
  </Signature>
</Signatures>

<Details>
  <Detail action="add|modify|withdraw">
    <DetailNumber />
    <ProgramCode />
    <ImprovementType />
    <DemoID />
    <WithdrawalArea />
    <ProjectPrefix />
    <ACFunds />
    <FederalFunds />
    <StateFunds />
    <LocalFunds />
    <PrivateFunds />
    <NonMoneyDonations />
    <OtherFunds />
    <ACConvertedAmount />
    <SoftMatchAmount />
    <PercentFederalShare />
    <IsTollRoad />
    <IsSafety />
    <IsTemporaryMatch />
    <IsIndianReservation />
    <IsAppalachia />
    <IsConstruction />
    <IsDesignBuild />
    <IsCMGC />
    <IsOtherSEP14 />
    <IsHwysForLife />
    <GISOmissionJustification/>
  <Locations>
    <NonGIS>
      <CountyCode />
      <UrbanCode />
      <CongDistrict />
      <UrbanOrRural />
      <FunctionalSystem />
      <SystemCode />
      <GeneralOwnership />
      <StructureNumber />
      <PercentOfDetailFunds />
    </NonGIS>
    <GIS>
      <RouteID />
      <BeginPoint />
      <EndPoint />
      <StructureNumber />
    </GIS>
  </Locations>
</Details>
```

```

    <PercentOfDetailFunds />
  </GIS>
</Locations>

  <UserDefinedFields>
    <UserDefinedField>
      <FieldName />
      <ValueText />
      <ValueNumber />
      <ValueDate />
    </UserDefinedField>
  </UserDefinedFields>
</Detail>
</Details>
</Project>
</Projects>

```

Projects Tag Elements Description

XML Tag Name	Description	Restrictions
ProgramCode	Identifying program code for the project	Any program code from a detail line on the project. Since the 7-character project ID is not always unique within a State, this program code serves to uniquely identify the project. This is because the same program code cannot occur on more than one project that shares the same State and 7-character project ID.
RecipientID	ID of the Recipient (Will be the State FIPS Code)	Number. See appendix for valid values
FederalProjectNumber	Federal number used to identify the project	Character field. Must be 7 characters. Note: In cases where the State includes suffix, this field contains a 7-character project ID followed by a hyphen and a 2 digit suffix. Example: ppppppp-01 Suffix is allowed but not required.
ProjectType	Type of project	Numeric field. See appendix for list of valid values.
DUNS	DUNS Number	Character field. Max Length: 9
ProjectTitle	Brief description of the project.	Character field. Max Length: 150
ProjectDescription	Detailed description of the project.	Character field. Max Length: 2000
ProjectCompletedDate	The date all work and inspections were completed.	Date in MM/DD/YYYY
ProjectOversight	FHWA Project oversight code.	Numeric field. See appendix for list of valid values.
STIPReference	STIP reference	Character field. Max Length: 50
IsEREligible	Flag to indicate if the	Boolean: Y or N

	project is eligible for Emergency Relief	
DisasterFiscalYear	Disaster fiscal year	Year in YYYY.
DisasterSequenceNumber	Disaster sequential number	Numeric field. Max length: 3.
ERCode	Emergency Relief code	Character field. Max Length: 8
RecipientDocRemarks	Recipient/State remarks that will appear on the Project Agreement	Character field. Max Length: 4000
RecipientComments	Temporary Recipient/State comments used to communicate status of pending project	Character field. Max Length: 4000

RecipientProjectNumbers Tag Elements Description

XML Tag Name	Description	Restrictions
RecipientProjectNumbers	Project identifier used by the State	Character field. Max Length: 13

ProjectGroups Tag Elements Description

XML Tag Name	Description	Restrictions
GroupCode	Project Group Code that identifies a Project Group	Character field. Max Length: 13

RelatedProjects Tag Elements Description

XML Tag Name	Description	Restrictions
ProgramCode	Identifying program code for the to-be related project	Any program code from a detail line on the to-be related project. Since the 7-character project ID is not always unique within a State, this program code serves to uniquely identify the project. This is because the same program code cannot occur on more than one project that shares the same State and 7-character project ID.
RecipientID	ID of the Recipient of the to-be related project	Number field. See appendix for valid values
FederalProjectNumber	Federal Project number of the to-be related project	Character field. Must be 7 characters. Note: In cases where the State includes suffix, this field contains a 7-character project ID followed by a hyphen and a 2 digit suffix. Example: ppppppp-01. Suffix is allowed but not required.
RelationType	Relationship type	Number. See appendix for valid values

UserDefinedFields Tag Elements Description

XML Tag Name	Description	Restrictions
FieldName	User Defined Field's name	Character field. Max Length: 50
The user can only provide one of the below 4 elements depending on the datatype of the user defined field. For e.g., if the user defined field is a character field, then the user will provide the <ValueText> element with the field's content/value.		
ValueText	Character value	Character field. Max Length: 250
ValueNumber	Numeric value	Number field.
ValueDate	Date value	Date in MM/DD/YYYY
ValueBoolean	Boolean value	Y or N

Signatures Tag Elements Description

XML Tag Name	Description	Restrictions
Name	Name of signor	Character field. Max Length: 50
Date	Date & Time of Signature	Date in MM/DD/YYYY HH24:MI:SS
Type	Type of Signature	Number. See appendix for valid values. Note: Values 1, 2 & 3 correspond to Recipient signatures and these are the valid values for this field in the Project Upload XML file

Details Tag Elements Description

XML Tag Name	Description	Restrictions
DetailNumber	Detail line number	Number. Max Value: 255
ProgramCode	Program Code	Character field. Max Length: 4
ImprovementType	Improvement type	Number. See list of Improvement types in the Geospatial Capabilities section.
DemoID	Demo ID	Character field. Max Length: 5
WithdrawalArea	Withdrawal area	Character field. Max Length: 3
Prefix	Project Prefix	Character Field Max Length:10
ACFunds	Advanced Constructions funds	Money field.
FederalFunds	Federal funds	Money field.
StateFunds	State funds	Money field.
LocalFunds	Local funds	Money field.
PrivateFunds	Private funds	Money field.
NonMonetaryFunds	Non-Monetary donations	Money field.
OtherFunds	Other Funds	Money field.

ACConvertedAmount	Advanced Construction Converted amount	Money field.
SoftMatchFunds	Soft Match funds	Money field.
PercentFederalShare	Percent federal share	Cannot exceed 100%. Two decimal places are allowed.
IsTollRoad	Indicates Toll Facilities financed with Federal Funds.	Boolean: Y or N
IsSafety	Indicates if the project is 100% safety.	Boolean: Y or N
IsTemporatyMatch	Indicates funds waived of the State matching share requirement.	Boolean: Y or N
IsIndianReservation	Identifies whether the project is on an Indian Reservation.	Boolean: Y or N
IsAppalachia	Appalachia designation	Boolean: Y or N
IsConstruction	Identifies whether the project is a construction project.	Boolean: Y or N
IsDesignBuild	An agreement that provides for design and construction by a contractor, regardless of whether the agreement is in the form of a design build contract, franchise agreement or any other form of contract approved by the Secretary.	Boolean: Y or N
IsCMGC	Construction Manager/General Contractor	Boolean: Y or N
IsOtherSEP14	FHWA's special Experimental Project No. 14 that allows the states to use alternative project delivery or alternative contracting procedures.	Boolean: Y or N
IsHwysForLife	Highway categorization	Boolean: Y or N
GISOmissionJustification	Justification as to why the GIS data is not provided	Number. See Appendix for valid values

Locations - GIS Tag Elements Description

XML Tag Name	Description	Restrictions
RouteID	Route ID	Character field. Max Length: 60
BeginPoint	Begin mile point	Number
EndPoint	End mile point	Number
StructureNumber	NBI Bridge Number or Tunnel Number	Character field. Max Length: 50
PercentOfDetailFunds	Percent of Detail Funds to be applied to the roadway, bridge or tunnel	Cannot exceed 100%. Two decimal places are allowed.

Locations -NonGIS Tag Elements Description

XML Tag Name	Description	Restrictions
CountyCode	County code	Number. Same as in FMIS 4 except 0 will be used for statewide.
UrbanCode	Urban area code	Must be SUA (small urbanized area), SWP

		(statewide planning) or a valid urban code. See Appendix for valid values
CongDistrict	Congressional district	Number. See Appendix for valid values
UrbanOrRural	Rural or urban designation	Number. See appendix for valid values
GeneralOwnership	Ownership type	Number. See appendix for valid values.
FunctionalSystem	Functional system code	Number. See appendix for valid values
SystemCode	Federal-Aid System code	Number. See appendix for valid values
StructureNumber	NBI Bridge Number or Tunnel Number	Character field. Max Length: 50
PercentOfDetailFunds	Percent of Detail Funds to be applied to the roadway, bridge or tunnel	Number.

Attributes Description

XML Attribute Name	XML Tag(s)	Description
add	Project, Detail	Add a new project and detail
modify	Project, Detail	Modify an existing project and/or detail
withdraw	Project, Detail	Withdraw the project or detail record
delete	Project	Delete a pending project that has no signatures
close	Project	Close the project
reestablish	Project	Reestablish the project

FMIS Upload File Examples

[1] Add Project

To create a project record with detail information, the file must contain the project fields and the detail fields as shown in the below example.

Note: In this example, the locations element is shown to contain the GIS element. Other GIS and Non-GIS examples are provided later in this document.

```
<?xml version="1.0" encoding="utf-8"?>
<Projects>
  <Project action="add">
    <ProgramCode>H050</ProgramCode>
    <RecipientID>1</RecipientID>
    <FederalProjectNumber>ABC123</FederalProjectNumber>
    <ProjectType>1</ProjectType>
    <DUNS>123456789</DUNS>
    <ProjectTitle>This is Project Title</ProjectTitle>
    <ProjectOversight>1</ProjectOversight>
  <!--
  Any of the other Project elements
  -->
  <Details>
    <Detail action="add">
      <DetailNumber>1</DetailNumber>
```

```

    <ProgramCode>H050</ProgramCode>
    <ImprovementType>1</ImprovementType>
<!--
One of the fund amounts is required
-->
    <FederalFunds>1000.00</FederalFunds>

    <PercentFederalShare>80</PercentFederalShare>
    <IsSafety>Y</IsSafety>
    <IsTollRoad>N</IsTollRoad>
    <IsTemporaryMatch>Y</IsTemporaryMatch>
    <IsIndianReservation>N</IsIndianReservation>
    <IsAppalachia>Y</IsAppalachia>
    <IsConstruction>N</IsConstruction>
    <IsDesignBuild>Y</IsDesignBuild>
    <IsCMGC>N</IsCMGC>
    <IsOtherSEP14/>Y</IsOtherSEP14>
    <IsHwysForLife/>N</IsHwysForLife>

<!--
Locations element
-->
    <Locations>
        <GIS>
            <RouteID>112</RouteID>
            <BeginPoint>10</BeginPoint>
            <EndPoint>25</EndPoint>
            <PercentofDetailFunds>100</PercentofDetailFunds>
        </GIS>
    </Locations>

    <!--
        Any of the other Detail elements
    -->
</Detail>
</Details>
</Project>
</Projects>

```

[2] Modify Project

To modify an existing project record, there are two options:

- 1) You can send in the entire project record that contains fields that need to be modified (or)
- 2) You can just send the data fields that need to be modified in the project along with the project's key fields. The Program Code, Recipient ID, and Federal Project Number in the Projects tag are the project's key fields that uniquely identify a project. Detail Number, Program Code and Improvement Type are the key fields that uniquely identify a detail record within a project.

Note: The examples provided in all the scenarios below will use the option 2 though option 1 can also be used in all those scenarios.

For example to update DUNS number in the project header record and Percent Federal Share field in the detail record, the following XML will suffice though you can send in the entire XML record for the Project with the updated DUNS and Percent Federal Share values.

```
<?xml version="1.0" encoding="utf-8"?>
<Projects>
  <Project action="modify">
    <ProgramCode>H050</ProgramCode>
    <RecipientID>1</RecipientID>
    <FederalProjectNumber>ABC1234</FederalProjectNumber>
    <DUNS>DUN123</DUNS>
    <Details>
      <Detail action="modify">
        <DetailNumber>1</DetailNumber>
        <ProgramCode>H050</ProgramCode>
        <ImprovementType>1</ImprovementType>
        <PercentFederalShare>80</PercentFederalShare>
      </Detail>
    </Details>
  </Project>
</Projects>
```

Note: The state signatures can also be provided along with the project changes as shown below.

```
<?xml version="1.0" encoding="utf-8"?>
<Projects>
  <Project action="modify">
    <ProgramCode>H050</ProgramCode>
    <RecipientID>1</RecipientID>
    <FederalProjectNumber>ABC1234</FederalProjectNumber>
    <DUNS>DUN123</DUNS>
    <Details>
      <Detail action="modify">
        <DetailNumber>1</DetailNumber>
        <ProgramCode>H050</ProgramCode>
        <ImprovementType>1</ImprovementType>
        <PercentFederalShare>80</PercentFederalShare>
      </Detail>
    </Details>

    <Signatures>
      <Signature type='certify'>
        <Name>John David</Name>
        <Date>09/25/2013 14:00:00</Date>
      </Signature>
      <Signature type='recommend'>
        <Name>David Warner</Name>
        <Date>09/25/2013 14:00:00</Date>
      </Signature>
      <Signature type='approve'>
        <Name>Betsy Williams</Name>
        <Date>09/25/2013 14:00:00</Date>
      </Signature>
    </Signatures>
  </Project>
```

```
</Projects>
```

[3] Related Projects, State Project Numbers & Special Project Groups

To update Related Projects, State Project Numbers and Special Project Groups information in an existing project record, the entire record set needs to be provided rather than just the modified record. For example, if project ZZZ1234 is currently related to project AAA1234 and the need is to modify the project record to add another project BBB1234 as a related project, then the XML needs to include both the related project elements as shown below. If the related project record AAA1234 is not included in the XML file, then it will be deleted from the project record.

Please note that when the final division signature is applied for this project modification, the relation becomes two-way; meaning that the Project ZZZ1234 will become related to project BBB1234 and project BBB1234 will also become related to ZZZ1234. This is a departure from FMIS 4.

```
<?xml version="1.0" encoding="utf-8"?>
<Projects>
  <Project action="modify">
    <ProgramCode>H050</ProgramCode>
    <RecipientID>1</RecipientID>
    <FederalProjectNumber>ZZZ1234</FederalProjectNumber>
    <RelatedProjects>
      <RelatedProject>
        <ProgramCode>AAA1</ProgramCode>
        <RecipientID>1</RecipientID>
        <FederalProjectNumber>AAA1234</FederalProjectNumber>
        <RelationType>4</RelationType>
      </RelatedProject>
      <RelatedProject>
        <ProgramCode>BBB1</ProgramCode>
        <RecipientID>1</RecipientID>
        <FederalProjectNumber>BBB1234</FederalProjectNumber>
        <RelationType>4</RelationType>
      </RelatedProject>
    </RelatedProjects>
  </Project>
</Projects>
```

The above example shall be used as a basis for adding/modifying or deleting State Project Numbers and Special Project Groups information in the project.

[4] Nullifying a field

To nullify a field on an existing project record, the XML will need to contain an empty tag corresponding to that field. For example, if the DUNS number needs to be nullified in an existing project record, the following will be the XML.

```
<?xml version="1.0" encoding="utf-8"?>
<Projects>
  <Project action="modify">
    <ProgramCode>H050</ProgramCode>
    <RecipientID>1</RecipientID>
    <FederalProjectNumber>ABC123</FederalProjectNumber>
```

```

    <!--
      DUNS element shall be left empty
    -->
    <DUNS></DUNS>
  </Project>
</Projects>

```

[5] Modifying a project that already has State signature(s)

If a project already has state signatures and if there is a need to modify information in the project, the project needs to be first unsigned before it can be updated. To handle this scenario, the system will perform an implicit unsign action in order to allow the project updates. This action will first remove any state signatures on the project and the project record will then be updated with the information in the XML.

For example to update DUNS number in the project header record and Percent Federal Share field in the detail record for a project ABC1234 that already has state signatures, the following will be the XML.

```

<?xml version="1.0" encoding="utf-8"?>
<Projects>
  <Project action="modify">
    <ProgramCode>H050</ProgramCode>
    <RecipientID>1</RecipientID>
    <FederalProjectNumber>ABC1234</FederalProjectNumber>
    <DUNS>DUN123</DUNS>

    <Details>
      <Detail action="modify">
        <DetailNumber>1</DetailNumber>
        <ProgramCode>H050</ProgramCode>
        <ImprovementType>1</ImprovementType>
        <PercentFederalShare>80</PercentFederalShare>
      </Detail>
    </Details>
  </Project>
</Projects>

```

[6] Convert AC Funds Scenarios

a) **Same Detail:** The most common conversion of AC funds involves decrementing AC and incrementing Fed Funds on the same detail line. Use a detail action of "modify" on the "AC source" detail line which has the AC funds that are being converted.

1. AC converted funds and federal funds on the AC source line should be increased by the conversion amount.
2. Decrease AC amount by the conversion amount
3. **Example:** Assume that \$50 of AC is to be converted on the following detail line:

AC:	\$225	AC Converted: \$20
Fed funds:	\$100	

The following is the XML:

```
<?xml version="1.0" encoding="utf-8"?>
<Projects>
  <Project action="modify">
    <ProgramCode>H050</ProgramCode>
    <RecipientID>1</RecipientID>
    <FederalProjectNumber>ABC123</FederalProjectNumber>
    <Details>
      <Detail action="modify">
        <DetailNumber>1</DetailNumber>
        <ProgramCode>H050</ProgramCode>
        <ImprovementType>1</ImprovementType>
        <ACFunds>175.00</ACFunds>
        <FederalFunds>150.00</FederalFunds>
        <ACConvertedAmount>70.00</ACConvertedAmount>
      </Detail>
    </Details>
  </Project>
</Projects>
```

Note: EDS will not perform checks to assure that the above amounts have all been incremented/decremented by \$50. This is because it is possible that the State is combining other actions with the AC conversion. For example, assume that for the same detail line above, \$200 in AC is to be converted, and an additional \$30 in federal funds is to be obligated. Note that the change in federal funds is \$230, whereas the change in AC and AC converted is 200. The following will be the XML for this scenario.

```
<?xml version="1.0" encoding="utf-8"?>
<Projects>
  <Project action="modify">
    <ProgramCode>H050</ProgramCode>
    <RecipientID>1</RecipientID>
    <FederalProjectNumber>ABC123</FederalProjectNumber>
    <Details>
      <Detail action="modify">
        <DetailNumber>1</DetailNumber>
        <ProgramCode>H050</ProgramCode>
        <ImprovementType>1</ImprovementType>
        <ACFunds>25.00</ACFunds>
        <FederalFunds>330.00</FederalFunds>
        <ACConvertedAmount>220.00</ACConvertedAmount>
      </Detail>
    </Details>
  </Project>
</Projects>
```

6. **Other Detail** - Conversion of AC funds to federal funds on one or more "receiving" detail lines other than the AC source line simply requires XML to be sent for the receiving lines as well as for the source line.

The receiving detail lines may be pre-existing or new. **Example:** Assume that \$50 of AC is to be converted from detail line 1 below, with \$30 to be applied to pre-existing detail line 2, and \$20 to be applied to detail line 3, which is new.

Detail line 1

AC:	\$200	AC Converted: \$20
Fed funds:	\$100	

Detail line 2

AC:	\$0	AC Converted: \$0
Fed funds:	\$400	

```
<?xml version="1.0" encoding="utf-8"?>
<Projects>
  <Project action="modify">
    <ProgramCode>H050</ProgramCode>
    <RecipientID>1</RecipientID>
    <FederalProjectNumber>ABC123</FederalProjectNumber>
    <Details>
<!-- Detail Line 1 -->
      <Detail action="modify">
        <DetailNumber>1</DetailNumber>
        <ProgramCode>H050</ProgramCode>
        <ImprovementType>1</ImprovementType>
        <ACFunds>150.00</ACFunds>
        <FederalFunds>100.00</FederalFunds>
        <ACConvertedAmount>70.00</ACConvertedAmount>
      </Detail>
<!-- Detail Line 2 -->
      <Detail action="modify">
        <DetailNumber>2</DetailNumber>
        <ProgramCode>H060</ProgramCode>
        <ImprovementType>1</ImprovementType>
        <ACFunds>0.00</ACFunds>
        <FederalFunds>430.00</FederalFunds>
        <ACConvertedAmount>0.00</ACConvertedAmount>
      </Detail>
<!-- Detail Line 3 -->
      <Detail action="add">
        <DetailNumber>3</DetailNumber>
        <ProgramCode>H070</ProgramCode>
        <ImprovementType>1</ImprovementType>
        <ACFunds>0.00</ACFunds>
        <FederalFunds>20.00</FederalFunds>
        <ACConvertedAmount>0.00</ACConvertedAmount>
        <PercentFederalShare>80</PercentFederalShare>
        <IsSafety>Y</IsSafety>
        <IsTollRoad>N</IsTollRoad>
        <IsTemporaryMatch>Y</IsTemporaryMatch>
        <IsIndianReservation/>N</IsIndianReservation>
        <IsAppalachia>Y</IsAppalachia>
      </Detail>
    </Details>
  </Project>
</Projects>
```

```

<IsConstruction>N</IsConstruction>
<IsDesignBuild>Y</IsDesignBuild>
<IsCMGC>N</IsCMGC>
<IsOtherSEP14/>Y</IsOtherSEP14>
<IsHwysForLife/>N</IsHwysForLife>

    </Detail>
  </Details>
</Project>
</Projects>

```

Note: In the example above, EDS does not attempt to reconcile data for detail lines 2 and 3 with the change in the conversion amount on detail line 1. EDS will simply process the XML for the detail lines as three unrelated actions. As such, detail line 3 will not inherit program code, improvement type or any other values from detail line one. The XML for line 3 would need to contain all values that are required to establish a new detail line.

[7] Project Detail Locations (GIS & Non-GIS)

When the location tag is included for a detail line, all locations for the detail line must be included, rather than just those locations that are being added, removed or changed. When modifying an existing detail line, the locations in the XML file will replace any locations the detail line had previously.

A) For adding a project detail record for a roadway with geospatial location information, the XML needs to have the following location information: Route ID, Beginning Mile Point and Ending Mile Point. The Percent of Detail Funds is optional and if it's not provided the system will automatically assign a default "percentage of funds" to each route ID, based on its share of total mileage across all route IDs for the detail line.

In the example below, a detail line is added with federal funds of \$100,000 and this fund amount is equally divided between two routes (Route ID 112 & Route ID 113).

```

<?xml version="1.0" encoding="utf-8"?>
<Projects>
  <Project action="modify">
    <ProgramCode>H050</ProgramCode>
    <RecipientID>1</RecipientID>
    <FederalProjectNumber>ABC123</FederalProjectNumber>
    <Details>
      <Detail action="add">
        <DetailNumber>2</DetailNumber>
        <ProgramCode>H050</ProgramCode>
        <ImprovementType>2</ImprovementType>
        <FederalFunds>100000.00</FederalFunds>
        <PercentFederalShare>80</PercentFederalShare>
        <IsSafety>Y</IsSafety>
        <IsTollRoad>N</IsTollRoad>
        <IsTemporaryMatch>Y</IsTemporaryMatch>
        <IsIndianReservation/>N</IsIndianReservation>
        <IsAppalachia>Y</IsAppalachia>
        <IsConstruction>N</IsConstruction>
      </Detail>
    </Details>
  </Project>
</Projects>

```

```

<IsDesignBuild>Y</IsDesignBuild>
<IsCMGC>N</IsCMGC>
<IsOtherSEP14/>Y</IsOtherSEP14>
<IsHwysForLife/>N</IsHwysForLife>

<!-- Location Information -->
  <Locations>
    <GIS>
      <RouteID>112</RouteID>
      <BeginPoint>10</BeginPoint>
      <EndPoint>25</EndPoint>
      <PercentofDetailFunds>50</PercentofDetailFunds>
    </GIS>
    <GIS>
      <RouteID>113</RouteID>
      <BeginPoint>1</BeginPoint>
      <EndPoint>15</EndPoint>
      <PercentOfDetailFunds>50</PercentOfDetailFunds>
    </GIS>
  </Locations>
</Detail>
</Details>
</Project>
</Projects>

```

B) For adding a project detail record for a bridge or tunnel improvement type with geospatial location information, the XML needs to have the Route ID, Begin Mile Point, Structure Number and Percent of Detail Funds.

In the example below, a detail line is added with federal funds of \$100,000 and this fund amount is equally divided between two bridges (Route ID 200 & Route ID 201).

```

<?xml version="1.0" encoding="utf-8"?>
<Projects>
  <Project action="modify">
    <ProgramCode>H050</ProgramCode>
    <RecipientID>1</RecipientID>
    <FederalProjectNumber>ABC123</FederalProjectNumber>
    <Details>
      <Detail action="add">
        <DetailNumber>2</DetailNumber>
        <ProgramCode>H050</ProgramCode>
        <ImprovementType>2</ImprovementType>
        <FederalFunds>100000.00</FederalFunds>
        <PercentFederalShare>80</PercentFederalShare>
        <IsSafety>Y</IsSafety>
        <IsTollRoad>N</IsTollRoad>
        <IsTemporaryMatch>Y</IsTemporaryMatch>
        <IsIndianReservation/>N</IsIndianReservation>
        <IsAppalachia>Y</IsAppalachia>
        <IsConstruction>N</IsConstruction>
        <IsDesignBuild>Y</IsDesignBuild>
        <IsCMGC>N</IsCMGC>
        <IsOtherSEP14/>Y</IsOtherSEP14>
      </Detail>
    </Details>
  </Project>
</Projects>

```

```

    <IsHwysForLife/>N</IsHwysForLife>
<!-- Location Information -->
  <Locations>
    <GIS>
      <RouteID>200</RouteID>
      <BeginPoint>10</BeginPoint>
      <StructureNumber>A12345</StructureNumber >
      <PercentofDetailFunds>50</PercentofDetailFunds>
    </GIS>
    <GIS>
      <RouteID>201</RouteID>
      <BeginPoint>25</BeginPoint>
      <StructureNumber>B98765</StructureNumber>
      <PercentOfDetailFunds>50</PercentOfDetailFunds>
    </GIS>
  </Locations>
</Detail>
</Details>
</Project>
</Projects>

```

Note: In the example above, the <StructureNumber> element can be used to provide the Tunnel number if a project detail record of Tunnel Improvement type needs to be added.

C) For adding a project detail record for a roadway improvement type where geospatial information is optional (e.g., New Construction), the Non-GIS location information can be provided. In this scenario, the XML needs to have the following:

- County Code
- Urban Code (required only for "urban required" program codes)
- Congressional District (required in states that have multiple congressional districts and if county is not statewide)
- Urban or Rural indicator (required when county code other than statewide is selected or if the detail line is statewide and the recipient is DC)
- Functional System
- System Code (Federal-aid System Code)
- General Ownership
- Percent of Detail Funds

In the example below, a detail line is added with federal funds of \$100,000 and this fund amount is applied to a roadway.

```

<?xml version="1.0" encoding="utf-8"?>
<Projects>
  <Project action="modify">
    <ProgramCode>H050</ProgramCode>
    <RecipientID>1</RecipientID>
    <FederalProjectNumber>ABC123</FederalProjectNumber>
    <Details>
      <Detail action="add">

```

```

    <DetailNumber>2</DetailNumber>
    <ProgramCode>H050</ProgramCode>
    <ImprovementType>1</ImprovementType>
    <FederalFunds>100000.00</FederalFunds>
    <IsSafety>Y</IsSafety>
    <IsTollRoad>N</IsTollRoad>
    <IsTemporaryMatch>Y</IsTemporaryMatch>
    <IsIndianReservation/>N</IsIndianReservation>
    <IsAppalachia>Y</IsAppalachia>
    <IsConstruction>N</IsConstruction>
    <IsDesignBuild>Y</IsDesignBuild>
    <IsCMGC>N</IsCMGC>
    <IsOtherSEP14/>Y</IsOtherSEP14>
    <IsHwysForLife/>N</IsHwysForLife>

<!-- Location Information -->
    <Locations>
        <NonGIS>
            <CountyCode>1</CountyCode>
            <UrbanCode>199</UrbanCode>
            <CongDistrict>1</CongDistrict>
            <UrbanOrRural>1</UrbanOrRural>
            <FunctionalSystem>1</FunctionalSystem>
            <SystemCode>2</SystemCode>
            <GeneralOwnership>3</GeneralOwnership>
            <PercentofDetailFunds>100</PercentofDetailFunds>
        </NonGIS>
    </Locations>
</Detail>
</Details>
</Project>
</Projects>

```

[8] *Withdrawing a project or details*

a) To withdraw all detail lines in an active project, the “withdraw” action of the Project element shall be used. The required XML elements are the key fields for the project.

```

<?xml version="1.0" encoding="utf-8"?>
<Projects>
    <Project action="withdraw">
        <ProgramCode>H050</ProgramCode>
        <RecipientID>1</RecipientID>
        <FederalProjectNumber>ABC123</FederalProjectNumber>
    </Project>
</Projects>

```

b) To withdraw specific detail lines in an active project, the “withdraw” action of the Detail element shall be used. The project and detail record key fields are required in the XML file. In the below example, detail number 2 is withdrawn in the project ABC1234:

```

<?xml version="1.0" encoding="utf-8"?>
<Projects>

```

```

<Project action="modify">
  <ProgramCode>H050</ProgramCode>
  <RecipientID>1</RecipientID>
  <FederalProjectNumber>ABC1234</FederalProjectNumber>
  <Details>
    <Detail action="withdraw">
      <DetailNumber>2</DetailNumber>
      <ProgramCode>H050</ProgramCode>
      <ImprovementType>1</ImprovementType>
    </Detail>
  </Details>
</Project>
</Projects>

```

[9] Reestablish the project or details

a) To reestablish all detail lines in a withdrawn project, the “reestablish” action of the Project element shall be used. The required XML elements are the project’s key fields.

```

<?xml version="1.0" encoding="utf-8"?>
<Projects>
  <Project action="reestablish">
    <ProgramCode>H050</ProgramCode>
    <RecipientID>1</RecipientID>
    <FederalProjectNumber>ABC123</FederalProjectNumber>
  </Project>
</Projects>

```

b) To reestablish specific detail lines in an active project, the “reestablish” action of the Detail element shall be used. The project and detail record key fields are required in the XML file. In the below example, detail number 2 is reestablished in the project ABC1234:

```

<?xml version="1.0" encoding="utf-8"?>
<Projects>
  <Project action="modify">
    <ProgramCode>H050</ProgramCode>
    <RecipientID>1</RecipientID>
    <FederalProjectNumber>ABC1234</FederalProjectNumber>
    <Details>
      <Detail action="reestablish">
        <DetailNumber>2</DetailNumber>
        <ProgramCode>H050</ProgramCode>
        <ImprovementType>1</ImprovementType>
      </Detail>
    </Details>
  </Project>
</Projects>

```

[10] Deleting a project

Pending projects that have no signatures can be deleted. The XML shall contain the project key fields and shall use the “delete” action for the Project element.

```
<?xml version="1.0" encoding="utf-8"?>
<Projects>
  <Project action="delete">
    <ProgramCode>H050</ProgramCode>
    <RecipientID>1</RecipientID>
    <FederalProjectNumber>ABC1234</FederalProjectNumber>
  </Project>
</Projects>
```

[11] Closing a project

To close a project, the "close" action of the Project element shall be used. The required XML elements are the key fields for the project. Please note that the State is allowed to send in modifications to the project as part of the closing the project.

```
<?xml version="1.0" encoding="utf-8"?>
<Projects>
  <Project action="close">
    <ProgramCode>H050</ProgramCode>
    <RecipientID>1</RecipientID>
    <FederalProjectNumber>ABC1234</FederalProjectNumber>
  </Project>
</Projects>
```

Error Message Format

Whenever a XML file with project and/or detail records is uploaded through EDS, the system will provide status of the upload. If the upload was successful, an XML file with the count of the project records that were successfully processed will be returned.

```
<?xml version="1.0" encoding="utf-8"?>
<Projects>
  <ProcessedProjectsCount>10</ProcessedProjectsCount>
</Projects>
```

If there were any problems with the upload, appropriate error message for each project, along with the input XML, will be provided for each project. Only the project with upload issues will not be loaded into the system. All other projects that passed validations will be uploaded into the system.

Below is an example of a scenario where a project is not processed due to a validation error.

Input File:

```
<?xml version="1.0" encoding="utf-8"?>
<Projects>
<!--
  Project1 - Project Title element is empty
-->
  <Project action="add">
    <ProgramCode>H050</ProgramCode>
```

```

<RecipientID>1</RecipientID>
<FederalProjectNumber>ABC1234</FederalProjectNumber>
<ProjectType>1</ProjectType>
<DUNS>123456789</DUNS>
<ProjectTitle></ProjectTitle>
<ProjectOversight>1</ProjectOversight>
<Details>
  <Detail action="add">
    <DetailNumber>1</DetailNumber>
    <ProgramCode>H050</ProgramCode>
    <ImprovementType>1</ImprovementType>
    <FederalFunds>1000.00</FederalFunds>
  </Detail>
</Details>
</Project>
<!--
  Project2
-->
<Project action="add">
  <ProgramCode>H050</ProgramCode>
  <RecipientID>1</RecipientID>
  <FederalProjectNumber>XYZ1234</FederalProjectNumber>
  <ProjectType>1</ProjectType>
  <DUNS>123456789</DUNS>
  <ProjectTitle>This is Project Title</ProjectTitle>
  <ProjectOversight>1</ProjectOversight>
  <Details>
    <Detail action="add">
      <DetailNumber>1</DetailNumber>
      <ProgramCode>H050</ProgramCode>
      <ImprovementType>1</ImprovementType>
      <FederalFunds>1000.00</FederalFunds>
    </Detail>
  </Details>
</Project>
</Projects>

```

In the above scenario, the EDS input XML file has two project records to be added to the system (Note: Not all the project and detail elements are shown in the above XML. This example is just to demonstrate a scenario when a project is not loaded due to errors).

The first project record is missing a required field (project title) and the second project record contains all the required fields. The system will successfully upload the second project record and will return an error message in the following XML format for the first project record. There will be one <Errors> element and (1..n) <Error> elements depending on the number of errors. In this example there was one error and so there is one <Error> element under the <Errors> element.

The ProcessedProjectsCount element will contain the value 1 since only one of the two project records was processed successfully.

```

<?xml version="1.0" encoding="utf-8"?>
<Projects>

```

```

<ProcessedProjectsCount>1</ProcessedProjectsCount>
<Project action="add">
  <Errors>
    <Error>Project Title is required</Error>
  </Errors>
  <ProgramCode>H050</ProgramCode>
  <RecipientID>1</RecipientID>
  <FederalProjectNumber>ABC1234</FederalProjectNumber>
  <ProjectType>1</ProjectType>
  <DUNS>123456789</DUNS>
  <ProjectTitle></ProjectTitle>
  <ProjectOversight>1</ProjectOversight>
  <Details>
    <Detail action="add">
      <DetailNumber>1</DetailNumber>
      <ProgramCode>H050</ProgramCode>
      <ImprovementType>1</ImprovementType>
      <FederalFunds>1000.00</FederalFunds>
      <PercentFederalShare>80</PercentFederalShare>
    </Detail>
  </Details>
</Project>
</Projects>

```

Project Data Download Format

Project data download will be done using the XML file format explained in the “FMIS Download File XML Tags” section. Each data item is represented by one XML tag. Users will make a request using a Request file which will contain an XPath query. The request file will then be submitted to the FMIS server via a web service and the result will be a XML file format with the selected project records.

Request File Format

Users will specify filters in the request file to select which records should be downloaded. The Request file uses a process called **XPath** to select the records.

XPath is a query language for selecting nodes from an XML document. In addition, XPath may be used to compute values from the content of an XML document.

Some examples of XPath queries are listed below.

- 1) Use the following XPath query to download all current project records:

```
//Projects
```

- 2) Use the following XPath query to download all current projects which received final division signature on a particular date:

```
//Signature[DivisionApprovedSignature=xs:date('mm/dd/yyyy')]
```

- 3) Use the following XPath query to download only the project records which received final division signature on a particular date, or at least one expenditure on that day:

```
//Signature[DivisionApprovedSignature=xs:date('mm/dd/yyyy')] | //Expenditure[Date=
xs:date('mm/dd/yyyy']
```

- 4) Use the following XPath query to download only the project records with program code equals to C220:

```
//Detail[ProgramCode='C220']
```

Detail documentation and examples on how to use XPath can be found in the following web site:

<http://www.w3schools.com/xpath/>

FMIS Download File XML Tags

```
<?xml version="1.0" encoding="utf-8" ?>
<Projects>
  <Project>
    <RecipientID/>
    <FederalProjectNumber/>
    <RecipientProjectNumbers>
      <RecipientProjectNumber/>
    <RecipientProjectNumbers/>
    <ProjectType/>
    <ProjectStatus/>
    <ProjectAction/>
    <LastActionDate/>
    <DUNS/>
    <ProjectTitle/>
    <ProjectDescription/>
    <ProjectCompletedDate/>
    <FinalVoucherPaidDate/>
    <LatestPaymentDate/>
    <EstConstructionDate/>
    <AuthPEDate/>
    <AuthROWDate/>
    <AuthConstructionDate/>
    <AuthSPRDate/>
    <AuthOtherDate/>
    <ProjectOversight/>
    <STIPReference/>
    <IsEREligible/>
    <DisasterFY/>
    <DisasterSeq/>
    <ERCode/>
    <RecipientDocRemarks/>
    <DivisionDocRemarks/>

    <ProjectGroups>
      <ProjectGroup>
        <GroupCategory/>
        <GroupName/>
      </ProjectGroup>
    </ProjectGroups>
  </Project>
</Projects>
```

```

<RelatedProject>
  <RecipientID />
  <FederalProjectNumber />
  <RelationType />
</RelatedProject>
</RelatedProjects>

<UserDefinedFields>
  <UserDefinedField>
    <FieldName />
    <FieldType />
    <ValueText />
    <ValueNumber />
    <ValueDate />
  </UserDefinedField>
</UserDefinedFields>
<ModificationCount/>
<ProjectFirstUpdatedBy/>
<ProjectFirstUpdatedOn/>

<LegacyBridgeInfo>
  <Bridge>
    <NBI#/>
    <ProgramCode/>
    <ImprovementType/>
  </Bridge>
</LegacyBridgeInfo>

<Signatures>
  <ReasonForNoStateSignature/>
  <SingleSignatureJustification/>
  <Signature>
    <Name></Name>
    <Date></Date>
    <Type></Type>
  </Signature>
</Signatures>
<Details>
  <Detail>
    <DetailNumber/>
    <ProgramCode/>
    <ImprovementType/>
    <DetailStatus/>
    <DemoID/>
    <WithdrawalArea/>
    <ProjectPrefix/>
    <LastActionDate/>
    <ACConvertedAmount/>
    <SoftMatchAmount/>
    <PercentFederalShare/>
    <IsTollRoad/>
    <IsSafety/>
    <IsTemporaryMatch/>
    <IsIndianReservation/>
    <IsAppalachia/>
  </Detail>
</Details>

```

```

<IsConstruction/>
<IsDesignBuild/>
<IsCMGC/>
<IsOtherSEP14/>
<IsHwysForLife/>
<UserDefinedFields>
  <UserDefinedField>
    <FieldName />
    <FieldType />
    <ValueText />
    <ValueNumber />
    <ValueDate />
  </UserDefinedField>
</UserDefinedFields>
<Locations>
  <GISMissionJustification/>
  <NonGIS>
    <CongDistrict/>
    <CountyCode/>
    <UrbanCode/>
    <UrbanOrRural />
    <FunctionalSystem/>
    <SystemCode/>
    <GeneralOwnership/>
    <StructureNumber/>
    <ACFunds/>
    <FederalFunds/>
    <StateFunds/>
    <LocalFunds/>
    <PrivateFunds/>
    <NonMoneyDonations/>
    <OtherFunds/>
  </NonGIS>
  <GIS>
    <RouteID/>
    <BeginPoint/>
    <EndPoint/>
    <PercentOfDetailFunds/>
    <StructureNumber/>
    <LocationBreakdown>
      <CongDistrict/>
      <CountyCode/>
      <UrbanCode/>
      <UrbanOrRural />
      <FunctionalSystem/>
      <SystemCode/>
      <GeneralOwnership/>
      <ACFunds/>
      <FederalFunds/>
      <StateFunds/>
      <LocalFunds/>
      <PrivateFunds/>
      <NonMoneyDonations/>
      <OtherFunds/>
    </LocationBreakdown>
  </GIS>
</Locations>

```

```
    </GIS>
  </Locations>
</Detail>
</Details>
<ROWRevolvingFunds/>
<Expenditures>
  <Expenditure>
    <ProgramCode/>
    <DemoID/>
    <Amount/>
  <Expenditure/>
</Expenditures>
</Project>
</Projects>
```

Current Bill Change Summary

Data File Upload

1. The transmitted data, which represents a current bill, will be submitted by the Recipients in a new pipe-delimited file format replacing the previous fixed length file format.
2. The new file format will no longer carry a header and trailer record. This new format is described in the section Current Bill Data Upload Format.

Data identification and categorization

1. The data uploaded will now be identified as a "bill", (previously known a batch) containing one or more program code and project number combinations of expenditure data. However, bills will be separated into categories or bill types using a separate indicator. Current categories are Federal Lands, ARRA, and Federal Aid (Highway Trust Fund).
2. Bill ids will be assigned on a daily basis as opposed to a monthly basis and will be in an alpha-numeric 12 character field. The format will be 'YYYYMMDD_NNN' where the 'YYYYMMDD' is the date on which the file was loaded successfully to the Current Bill database. The 'NNN' will be a three digit sequence number which resets every day.
3. Bill ids for a given category/type and organization will be numbered sequentially, starting with number 001 for the first category/type of the first file for the day, 002 for the second category/type of the first file for the day and so on. If the first file of the day has only one category/type, the second file will carry the number 002. Example: If the first file for a particular day received has all three categories of data specified in 1. above, the file will be split and loaded as follows:

First File: (Has all three types of data)

Bill ID	Category
YYYYMMDD_001	HTF (Highway Trust Fund)
YYYYMMDD_002	ARRA
YYYYMMDD_003	Federal Lands

Second File: (Has only two types of data)

Bill ID	Category
YYYYMMDD_004	HTF (Highway Trust Fund)
YYYYMMDD_005	ARRA

Currently, a duplicate batch is identified on an exact match on the requested payment amount and Recipient against a batch that has been approved by the FHWA Division Office in the past. This feature will be enhanced for a one to one comparison of all the detail lines (Recipient ID, program code, project number, Demo ID and project expenditure amount) between the two bills to determine if the incoming bill is a true duplicate. The payment recipient approving official will be notified that the bill they are accessing through the Bill Information screen is a duplicate and a message will be displayed if they still want to approve the bill or disapprove the same.

New Current Bill File Format

Current Bill Data Upload Format

Current Bill data upload will be done using a pipe-delimited file format. Each data item is separated by a pipe (|) symbol. Each line in the file represents one record. The very first line must have the column names. Column names are not case sensitive and separated by a pipe symbol (|).

The following table describes all fields for the Upload format:

Field Name	Field Type	Field Length	Description
BILL_DATE	Date		A State-assigned date that the State uses for its own purposes to track the bill.
PROGRAM_CODE	CHARACTER	4	Four-digit code Valid Program Code
RECIPIENT_ID	NUMERIC	4	Must be a valid recipient ID. Typically this is either a State FIPS code, or Federal Lands cost center.
ACTIVITY	CHARACTER	2	Two digit alphanumeric transaction code. Common value is '50'.
FEDERAL_PROJECT_NO	CHARACTER	7	Project Agreement Number
OBJECT_CLASS	CHARACTER	4	The code, which identifies the nature of services, articles, and other items for which obligations are incurred. Common value is '4100'.
DEMO_ID	CHARACTER	5	This field holds the Demo ID value which is validated for accuracy on the Program Code table.
TRANSACTION_TYPE	CHARACTER	2	This is the code that identifies the transaction to Delphi
DETAIL_AMOUNT	NUMERIC	15,2	The amount the State is requesting to be paid for this project.
REQSTD_PAYMENT_DATE	DATE		This is the date the payment is requested for

Example of an upload file

BATCH_DATE	PROGRAM_CODE	RECIPIENT_ID	ACTIVITY	FEDERAL_PROJECT_NO	OBJECT_CLASS	DEMO_ID	TRANSACTION_TYPE	DETAIL_AMOUNT	REQSTD_PAYMENT_DATE
9/25/2013	C230	0048	50	2009701	4100	TX210	20	959208.3	09/26/2013
9/25/2013	C230	0048	50	2010305	4100	TX300	20	333874.1	09/26/2013
9/25/2013	C240	0048	50	2009501	4100		20	39908963.1	09/26/2013
9/25/2013	F150	1548	50	2010220	4100		20	7089.2	09/26/2013
9/25/2013	9A01	1548	50	2007860	4100		20	1993.7	09/26/2013
9/25/2013	HY10	0048	50	2008125	4100		20	427.2	09/26/2013
9/25/2013	HY10	0048	50	2008128	4100		20	284.9	09/26/2013
9/25/2013	HY10	0048	50	2010854	4100		20	14619.5	09/26/2013
9/25/2013	HY10	0048	50	2012232	4100	93	20	16281.5	09/26/2013

Current Bill ID: 20130925_001

ARRA Invoices

Current Bill ID: 20130925_002

Federal Lands Invoices

Current Bill ID: 20130925_003

Highway Trust Fund Invoices

Current Bill Response File Format

A response file is generated after an upload file is processed. FMIS 5.0 will assign a bill ID to each record within the uploaded file. The response file format is pipe-delimited and will contain the following:

Field Name	Field Type	Field Length	Description
REQSTD_PAYMENT_DATE	DATE		<ul style="list-style-type: none"> ○ This is the date the payment is requested for
PAYMENT_TYPE	CHAR	1	<ul style="list-style-type: none"> ● Indicates the type of payment ● Available options: <ul style="list-style-type: none"> ○ H- Highway ○ F- Fed Land ○ A- ARRA
ASSIGNED_BILL_ID	NUMERIC	10	<ul style="list-style-type: none"> ○ System assigned. <p>Format = yyymmdd_nnn</p> <p>'yyyy' is the 4-digit year, 'mm' is the 2 digit month and 'dd' is the 2 digit date of the Requested Payment date and 'nnn' is the sequential number for that particular day.</p>

Current Bill Error File Format

The file upload process will generate an error file with all the records that failed uploading. The file format is pipe-delimited and will contain the following:

Field Name	Field Type	Field Length	Description
LINE_NUMBER	NUMERIC	6	This is the detail line number of a file that helps identify a detail line within each file.
INVOICE_DATE	DATE		This is the batch date from the input file.
PROGRAM_CODE	CHAR	4	A four-digit code which identifies the appropriation that authorized the obligation and expenditure of funds.
RECIPIENT_ID	NUMERIC	4	Must be a valid recipient ID. Typically this is either a State FIPS code, or Federal Lands cost center.
ACTIVITY	CHAR	2	Two digit alphanumeric transaction code. Common value is '50'.
FEDERAL_PROJECT_NO	CHAR	7	Project Agreement Number
OBJECT_CLASS	CHAR	4	The code, which identifies the nature of services, articles, and other items for which obligations are incurred. Common value is '4100'.
DEMO_ID	CHAR	5	This field displays the Demo ID value.
TRANSACTION_TYPE	CHAR	2	This is the code that identifies the transaction to Delphi.
DETAIL_AMOUNT	NUMERIC	15,2	The amount the State is requesting to be paid for this project.
PAYMENT_DATE	DATE		This is the date the payment is requested for.
ERROR_MESSAGE	CHAR	50	This is the entire error message corresponding to the line number.

Appendix A – List of Valid Codes

Functional System

Code	Description
1	Interstate
2	PA - Other Freeways and Expressways
3	PA - Other
4	Minor Arterial
5	Major Collector
6	Minor Collector
7	Local

General Ownership

Code	Description
1	State
2	Local
3	Other

GIS Omission Justification

Code	Description
1	New Construction
2	Off-roadway
3	Prepare for Close
4	Construction Complete

Project Oversight

Code	Description
1	Full Oversight/State Administered
2	Full Oversight/Locally Administered
3	Delegated/State Administered
4	Delegated/Locally Administered
5	Other
7	(Legacy) Full Oversight (NHS)
8	(Legacy) Full Oversight (non-NHS)
9	(Legacy) State Administered

Project Type

Code	Description
1	Conventional
2	Emergency Relief
3	Demo
4	STP
5	SIB

Relationship Type

Code	Description
1	Construction
2	Environmental Impact Statement
3	Joint-Funded with Another State
4	Multi-Funded
5	Preliminary Engineering
6	Right-Of-Way
7	Converted
8	Demo
9	Garvee

Recipient

ID	Description
1	Alabama
2	Alaska
4	Arizona
5	Arkansas
6	California
8	Colorado
9	Connecticut
10	Delaware
11	District of Columbia
12	Florida
13	Georgia
15	Hawaii
16	Idaho
17	Illinois
18	Indiana
19	Iowa
20	Kansas
21	Kentucky
22	Louisiana

23	Maine
24	Maryland
25	Massachusetts
26	Michigan
27	Minnesota
28	Mississippi
29	Missouri
30	Montana
31	Nebraska
32	Nevada
33	New Hampshire
34	New Jersey
35	New Mexico
36	New York
37	North Carolina
38	North Dakota
39	Ohio
40	Oklahoma
41	Oregon
42	Pennsylvania
44	Rhode Island
45	South Carolina
46	South Dakota
47	Tennessee
48	Texas
49	Utah
50	Vermont
51	Virginia
53	Washington
54	West Virginia
55	Wisconsin
56	Wyoming
60	American Samoa
66	Guam
69	Northern Mariana
72	Puerto Rico
78	Virgin Islands
91	Port Authority of NY and NJ

Urban or Rural

Code	Description
1	Urban
2	Rural

Signature Types

Code	Description
1	Recipient Certified Signature
2	Recipient Recommended Signature
3	Recipient Approved Signature
4	Division Reviewed Signature
5	Division Recommended Signature
6	Division Authorized Signature

System Code

Code	Description
1	Interstate
2	NHS Non-Interstate
3	Other Federal-aid Highway
4	Not on any Federal-aid System

Urban Codes

State	Urban_Code	Urban_Name
AK	2305	Anchorage
AK	28549	Fairbanks
AL	2629	Anniston--Oxford
AL	4033	Auburn
AL	7786	Birmingham
AL	19099	Columbus, GA--AL
AL	22285	Daphne--Fairhope
AL	22690	Decatur
AL	24472	Dothan
AL	29953	Florence
AL	32113	Gadsden
AL	40780	Huntsville
AL	57925	Mobile
AL	58600	Montgomery
AL	68482	Pensacola, FL--AL
AL	89110	Tuscaloosa
AR	19801	Conway
AR	29494	Fayetteville--Springdale--Rogers, AR--MO
AR	30925	Fort Smith, AR--OK
AR	40213	Hot Springs
AR	43345	Jonesboro
AR	50392	Little Rock
AR	56116	Memphis, TN--MS--AR

AR	69454	Pine Bluff
AR	87193	Texarkana--Texarkana, TX--AR
AZ	4549	Avondale--Goodyear
AZ	14401	Casa Grande
AZ	29818	Flagstaff
AZ	46747	Lake Havasu City
AZ	69184	Phoenix--Mesa
AZ	72112	Prescott Valley--Prescott
AZ	81901	Sierra Vista
AZ	88732	Tucson
AZ	98020	Yuma, AZ--CA
CA	2683	Antioch
CA	3196	Arroyo Grande--Grover Beach
CA	4681	Bakersfield
CA	12754	Camarillo
CA	16318	Chico
CA	19504	Concord
CA	22420	Davis
CA	22987	Delano
CA	26416	El Centro--Calexico
CA	27261	El Paso de Robles (Paso Robles)--Atascadero
CA	28657	Fairfield
CA	31843	Fresno
CA	33328	Gilroy--Morgan Hill
CA	36703	Hanford
CA	38215	Hemet
CA	41347	Indio--Cathedral City
CA	47611	Lancaster--Palmdale
CA	50527	Livermore
CA	50851	Lodi
CA	51040	Lompoc
CA	51445	Los Angeles--Long Beach--Anaheim
CA	52984	Madera
CA	54145	Manteca
CA	56251	Merced
CA	57709	Mission Viejo--Lake Forest--San Clemente
CA	58006	Modesto
CA	60799	Murrieta--Temecula--Menifee
CA	61057	Napa
CA	66673	Oxnard
CA	68887	Petaluma

CA	71074	Porterville
CA	73774	Redding
CA	74179	Reno, NV--CA
CA	75340	Riverside--San Bernardino
CA	77068	Sacramento
CA	78310	Salinas
CA	78661	San Diego
CA	78904	San Francisco--Oakland
CA	79039	San Jose
CA	79147	San Luis Obispo
CA	79282	Santa Barbara
CA	79309	Santa Clarita
CA	79336	Santa Cruz
CA	79417	Santa Maria
CA	79498	Santa Rosa
CA	80362	Seaside--Monterey
CA	82144	Simi Valley
CA	85087	Stockton
CA	87490	Thousand Oaks
CA	88273	Tracy
CA	89083	Turlock
CA	89866	Vacaville
CA	90028	Vallejo
CA	90541	Victorville--Hesperia
CA	90946	Visalia
CA	92890	Watsonville
CA	96994	Woodland
CA	97939	Yuba City
CA	98020	Yuma, AZ--CA
CO	9298	Boulder
CO	18856	Colorado Springs
CO	23527	Denver--Aurora
CO	30628	Fort Collins
CO	34273	Grand Junction
CO	34786	Greeley
CO	46126	Lafayette--Louisville--Erie
CO	51175	Longmont
CO	72613	Pueblo
CT	10162	Bridgeport--Stamford, CT--NY
CT	22096	Danbury, CT--NY
CT	37243	Hartford

CT	62407	New Haven
CT	63217	New York--Newark, NY--NJ--CT
CT	64135	Norwich--New London, CT--RI
CT	83926	Springfield, MA--CT
CT	92485	Waterbury
CT	97291	Worcester, MA--CT
DC	92242	Washington, DC--VA--MD
DE	24580	Dover
DE	69076	Philadelphia, PA--NJ--DE--MD
DE	78364	Salisbury, MD--DE
FL	8974	Bonita Springs
FL	13510	Cape Coral
FL	23311	Deltona
FL	31060	Fort Walton Beach--Navarre--Wright
FL	32167	Gainesville
FL	39758	Homosassa Springs--Beverly Hills--Citrus Springs
FL	42346	Jacksonville
FL	45451	Kissimmee
FL	45937	Lady Lake--The Villages
FL	46828	Lakeland
FL	48799	Leesburg--Eustis--Tavares
FL	56602	Miami
FL	63838	North Port--Port Charlotte
FL	64567	Ocala
FL	65863	Orlando
FL	67105	Palm Bay--Melbourne
FL	67134	Palm Coast--Daytona Beach--Port Orange
FL	67294	Panama City
FL	68482	Pensacola, FL--AL
FL	71479	Port St. Lucie
FL	77230	St. Augustine
FL	79606	Sarasota--Bradenton
FL	80400	Sebastian--Vero Beach South--Florida Ridge
FL	80416	Sebring--Avon Park
FL	84024	Spring Hill
FL	86464	Tallahassee
FL	86599	Tampa--St. Petersburg
FL	87787	Titusville
FL	96697	Winter Haven
FL	98182	Zephyrhills

GA	901	Albany
GA	3763	Athens-Clarke County
GA	3817	Atlanta
GA	4222	Augusta-Richmond County, GA--SC
GA	11026	Brunswick
GA	14185	Cartersville
GA	15832	Chattanooga, TN--GA
GA	19099	Columbus, GA--AL
GA	22069	Dalton
GA	32194	Gainesville
GA	39133	Hinesville
GA	52822	Macon
GA	76204	Rome
GA	79768	Savannah
GA	89974	Valdosta
GA	91783	Warner Robins
HI	43615	Kahului
HI	43669	Kailua (Honolulu County)--Kaneohe
HI	89770	Urban Honolulu
IA	2062	Ames
IA	14752	Cedar Rapids
IA	22366	Davenport, IA--IL
IA	23743	Des Moines
IA	24822	Dubuque, IA--IL
IA	41590	Iowa City
IA	65269	Omaha, NE--IA
IA	82225	Sioux City, IA--NE--SD
IA	92593	Waterloo
ID	8785	Boise City
ID	18451	Coeur d'Alene
ID	40996	Idaho Falls
ID	49312	Lewiston, ID--WA
ID	60976	Nampa
ID	70426	Pocatello
IL	1765	Alton, IL--MO
IL	6760	Beloit, WI--IL
IL	8407	Bloomington--Normal
IL	13537	Cape Girardeau, MO--IL
IL	13591	Carbondale
IL	15211	Champaign
IL	16264	Chicago, IL--IN

IL	22204	Danville
IL	22366	Davenport, IA--IL
IL	22717	Decatur
IL	22960	DeKalb
IL	24823	Dubuque, IA--IL
IL	43885	Kankakee
IL	44506	Kenosha, WI--IL
IL	68509	Peoria
IL	75718	Rockford
IL	76474	Round Lake Beach--McHenry--Grayslake, IL--WI
IL	77770	St. Louis, MO--IL
IL	83899	Springfield
IN	2386	Anderson
IN	8380	Bloomington
IN	16264	Chicago, IL--IN
IN	16885	Cincinnati, OH--KY--IN
IN	19126	Columbus
IN	26794	Elkhart, IN--MI
IN	28333	Evansville, IN--KY
IN	31087	Fort Wayne
IN	41212	Indianapolis
IN	45694	Kokomo
IN	46018	Lafayette
IN	51755	Louisville/Jefferson County, KY--IN
IN	56656	Michigan City--La Porte, IN--MI
IN	60625	Muncie
IN	83116	South Bend, IN--MI
IN	87139	Terre Haute
KS	43912	Kansas City, MO--KS
KS	48232	Lawrence
KS	53848	Manhattan
KS	77743	St. Joseph, MO--KS
KS	88084	Topeka
KS	95077	Wichita
KY	9379	Bowling Green
KY	16885	Cincinnati, OH--KY--IN
KY	17317	Clarksville, TN--KY
KY	26750	Elizabethtown--Radcliff
KY	28333	Evansville, IN--KY
KY	40753	Huntington, WV--KY--OH

KY	49582	Lexington-Fayette
KY	51755	Louisville/Jefferson County, KY--IN
KY	66484	Owensboro
LA	1279	Alexandria
LA	5680	Baton Rouge
LA	36514	Hammond
LA	40375	Houma
LA	46045	Lafayette
LA	46531	Lake Charles
LA	53794	Mandeville--Covington
LA	58330	Monroe
LA	62677	New Orleans
LA	81739	Shreveport
LA	82468	Slidell
MA	5167	Barnstable Town
MA	9271	Boston, MA--NH--RI
MA	49096	Leominster--Fitchburg
MA	61165	Nashua, NH--MA
MA	61786	New Bedford
MA	69778	Pittsfield
MA	72505	Providence, RI--MA
MA	83926	Springfield, MA--CT
MA	97291	Worcester, MA--CT
MD	199	Aberdeen--Bel Air South--Bel Air North
MD	4843	Baltimore
MD	21745	Cumberland, MD--WV--PA
MD	31519	Frederick
MD	36190	Hagerstown, MD--WV--PA
MD	49594	Lexington Park--California--Chesapeake Ranch Estates
MD	69076	Philadelphia, PA--NJ--DE--MD
MD	78364	Salisbury, MD--DE
MD	91261	Waldorf
MD	92242	Washington, DC--VA--MD
MD	94294	Westminster--Eldersburg
ME	4951	Bangor
ME	24607	Dover--Rochester, NH--ME
ME	49339	Lewiston
ME	71263	Portland
ME	71506	Portsmouth, NH--ME
MI	2602	Ann Arbor

MI	5707	Battle Creek
MI	5869	Bay City
MI	7138	Benton Harbor--St. Joseph--Fair Plain
MI	23824	Detroit
MI	26794	Elkhart, IN--MI
MI	29872	Flint
MI	34300	Grand Rapids
MI	39430	Holland
MI	42157	Jackson
MI	43723	Kalamazoo
MI	47719	Lansing
MI	56656	Michigan City--La Porte, IN--MI
MI	56980	Midland
MI	58357	Monroe
MI	60841	Muskegon
MI	71155	Port Huron
MI	77149	Saginaw
MI	83116	South Bend, IN--MI
MI	83332	South Lyon--Howell
MI	87868	Toledo, OH--MI
MN	24850	Duluth, MN--WI
MN	29089	Fargo, ND--MN
MN	34219	Grand Forks, ND--MN
MN	45910	La Crosse, WI--MN
MN	53983	Mankato
MN	57628	Minneapolis--St. Paul, MN--WI
MN	75637	Rochester
MN	77338	St. Cloud
MO	1765	Alton, IL--MO
MO	13537	Cape Girardeau, MO--IL
MO	18937	Columbia
MO	29494	Fayetteville--Springdale--Rogers, AR--MO
MO	42967	Jefferson City
MO	43399	Joplin
MO	43912	Kansas City, MO--KS
MO	48826	Lee's Summit
MO	77743	St. Joseph, MO--KS
MO	77770	St. Louis, MO--IL
MO	83953	Springfield
MS	35920	Gulfport
MS	37594	Hattiesburg

MS	42211	Jackson
MS	56116	Memphis, TN--MS--AR
MS	67807	Pascagoula
MT	7705	Billings
MT	34759	Great Falls
MT	57736	Missoula
NC	3358	Asheville
NC	11728	Burlington
NC	15670	Charlotte, NC--SC
NC	19558	Concord
NC	25228	Durham
NC	29440	Fayetteville
NC	32653	Gastonia
NC	33814	Goldsboro
NC	35164	Greensboro
NC	35380	Greenville
NC	38647	Hickory
NC	38809	High Point
NC	42400	Jacksonville
NC	60895	Myrtle Beach--Socastee, SC--NC
NC	61840	New Bern
NC	73261	Raleigh
NC	75988	Rocky Mount
NC	95833	Wilmington
NC	96670	Winston-Salem
ND	7921	Bismarck
ND	29089	Fargo, ND--MN
ND	34219	Grand Forks, ND--MN
NE	34246	Grand Island
NE	49933	Lincoln
NE	65269	Omaha, NE--IA
NE	82225	Sioux City, IA--NE--SD
NH	9271	Boston, MA--NH--RI
NH	24607	Dover--Rochester, NH--ME
NH	53740	Manchester
NH	61165	Nashua, NH--MA
NH	71506	Portsmouth, NH--ME
NJ	1495	Allentown, PA--NJ
NJ	3898	Atlantic City
NJ	25849	East Stroudsburg, PA--NJ
NJ	63217	New York--Newark, NY--NJ--CT

NJ	69076	Philadelphia, PA--NJ--DE--MD
NJ	71803	Poughkeepsie--Newburgh, NY--NJ
NJ	88462	Trenton
NJ	89263	Twin Rivers--Hightstown
NJ	90658	Villas
NJ	90730	Vineland
NM	1171	Albuquerque
NM	27253	El Paso, TX--NM
NM	29278	Farmington
NM	47935	Las Cruces
NM	51499	Los Lunas
NM	79363	Santa Fe
NV	14158	Carson City
NV	47995	Las Vegas--Henderson
NV	74179	Reno, NV--CA
NY	970	Albany--Schenectady
NY	7732	Binghamton, NY--PA
NY	10162	Bridgeport--Stamford, CT--NY
NY	11350	Buffalo
NY	22096	Danbury, CT--NY
NY	27118	Elmira
NY	33598	Glens Falls
NY	41914	Ithaca
NY	45262	Kingston
NY	56899	Middletown
NY	63217	New York--Newark, NY--NJ--CT
NY	71803	Poughkeepsie--Newburgh, NY--NJ
NY	75664	Rochester
NY	79633	Saratoga Springs
NY	86302	Syracuse
NY	89785	Utica
NY	92674	Watertown
OH	766	Akron
OH	13375	Canton
OH	16885	Cincinnati, OH--KY--IN
OH	17668	Cleveland
OH	19234	Columbus
OH	22528	Dayton
OH	40753	Huntington, WV--KY--OH
OH	49852	Lima
OH	51364	Lorain--Elyria

OH	54091	Mansfield
OH	56926	Middletown
OH	61705	Newark
OH	67672	Parkersburg, WV--OH
OH	83980	Springfield
OH	87868	Toledo, OH--MI
OH	93592	Weirton--Steubenville, WV--OH--PA
OH	94726	Wheeling, WV--OH
OH	97831	Youngstown, OH--PA
OK	30925	Fort Smith, AR--OK
OK	48394	Lawton
OK	63433	Norman
OK	65080	Oklahoma City
OK	88948	Tulsa
OR	955	Albany
OR	6868	Bend
OR	20422	Corvallis
OR	28117	Eugene
OR	34516	Grants Pass
OR	51283	Longview, WA--OR
OR	55981	Medford
OR	71317	Portland, OR--WA
OR	78229	Salem
OR	91405	Walla Walla, WA--OR
PA	1495	Allentown, PA--NJ
PA	1792	Altoona
PA	7732	Binghamton, NY--PA
PA	8434	Bloomsburg--Berwick
PA	15184	Chambersburg
PA	21745	Cumberland, MD--WV--PA
PA	25849	East Stroudsburg, PA--NJ
PA	27766	Erie
PA	36190	Hagerstown, MD--WV--PA
PA	36784	Hanover
PA	37081	Harrisburg
PA	37945	Hazleton
PA	43291	Johnstown
PA	47530	Lancaster
PA	48664	Lebanon
PA	58168	Monessen--California
PA	69076	Philadelphia, PA--NJ--DE--MD

PA	69697	Pittsburgh
PA	71749	Pottstown
PA	73693	Reading
PA	80227	Scranton
PA	84493	State College
PA	89650	Uniontown--Connellsville
PA	93592	Weirton--Steubenville, WV--OH--PA
PA	95455	Williamsport
PA	97750	York
PA	97831	Youngstown, OH--PA
PR	631	Aguadilla--Isabela--San Sebastián
PR	3034	Arecibo
PR	28981	Fajardo
PR	30115	Florida--Imbéry--Barceloneta
PR	35866	Guayama
PR	43453	Juana Díaz
PR	55738	Mayagüez
PR	70642	Ponce
PR	78985	San Germán--Cabo Rojo--Sabana Grande
PR	79093	San Juan
PR	97561	Yauco
RI	9271	Boston, MA--NH--RI
RI	64135	Norwich--New London, CT--RI
RI	72505	Providence, RI--MA
SC	2413	Anderson
SC	4222	Augusta-Richmond County, GA--SC
SC	15508	Charleston--North Charleston
SC	15670	Charlotte, NC--SC
SC	18964	Columbia
SC	30061	Florence
SC	32653	Gastonia
SC	35461	Greenville
SC	39079	Hilton Head Island
SC	55603	Mauldin--Simpsonville
SC	60895	Myrtle Beach--Socastee, SC--NC
SC	75745	Rock Hill
SC	83548	Spartanburg
SC	85708	Sumter
SD	73396	Rapid City
SD	82225	Sioux City, IA--NE--SD
SD	82252	Sioux Falls

TN	10351	Bristol--Bristol, TN--VA
TN	15832	Chattanooga, TN--GA
TN	17317	Clarksville, TN--KY
TN	17722	Cleveland
TN	42265	Jackson
TN	43210	Johnson City
TN	45235	Kingsport, TN--VA
TN	45640	Knoxville
TN	56116	Memphis, TN--MS--AR
TN	59410	Morristown
TN	60733	Murfreesboro
TN	61273	Nashville-Davidson
TX	280	Abilene
TX	1927	Amarillo
TX	4384	Austin
TX	6058	Beaumont
TX	10972	Brownsville
TX	18748	College Station--Bryan
TX	19755	Conroe--The Woodlands
TX	20287	Corpus Christi
TX	22042	Dallas--Fort Worth--Arlington
TX	23500	Denton--Lewisville
TX	27253	El Paso, TX--NM
TX	36892	Harlingen
TX	40429	Houston
TX	44992	Killeen
TX	46801	Lake Jackson--Angleton
TX	47854	Laredo
TX	51256	Longview
TX	51877	Lubbock
TX	52390	McAllen
TX	52687	McKinney
TX	57007	Midland
TX	64864	Odessa
TX	70993	Port Arthur
TX	78553	San Angelo
TX	78580	San Antonio
TX	79201	San Marcos
TX	81631	Sherman
TX	87058	Temple
TX	87193	Texarkana--Texarkana, TX--AR

TX	87220	Texas City
TX	89326	Tyler
TX	90514	Victoria
TX	91027	Waco
TX	95104	Wichita Falls
UT	50959	Logan
UT	64945	Ogden--Layton
UT	72559	Provo--Orem
UT	77446	St. George
UT	78499	Salt Lake City--West Valley City
VA	8002	Blacksburg
VA	10351	Bristol--Bristol, TN--VA
VA	15724	Charlottesville
VA	31600	Fredericksburg
VA	37162	Harrisonburg
VA	45235	Kingsport, TN--VA
VA	52201	Lynchburg
VA	74746	Richmond
VA	75421	Roanoke
VA	84630	Staunton--Waynesboro
VA	90892	Virginia Beach
VA	92242	Washington, DC--VA--MD
VA	95411	Williamsburg
VA	96103	Winchester
VT	11755	Burlington
WA	6652	Bellingham
WA	9946	Bremerton
WA	44479	Kennewick--Pasco
WA	49312	Lewiston, ID--WA
WA	51283	Longview, WA--OR
WA	55333	Marysville
WA	60490	Mount Vernon
WA	65242	Olympia--Lacey
WA	71317	Portland, OR--WA
WA	80389	Seattle
WA	83764	Spokane
WA	91405	Walla Walla, WA--OR
WA	93862	Wenatchee
WA	97507	Yakima
WI	2764	Appleton
WI	6760	Beloit, WI--IL

WI	24850	Duluth, MN--WI
WI	26038	Eau Claire
WI	30223	Fond du Lac
WI	34813	Green Bay
WI	42562	Janesville
WI	44506	Kenosha, WI--IL
WI	45910	La Crosse, WI--MN
WI	53200	Madison
WI	57466	Milwaukee
WI	57628	Minneapolis--St. Paul, MN--WI
WI	66160	Oshkosh
WI	73153	Racine
WI	76474	Round Lake Beach--McHenry--Grayslake, IL--WI
WI	81118	Sheboygan
WI	93025	Wausau
WI	93916	West Bend
WV	6139	Beckley
WV	15481	Charleston
WV	21745	Cumberland, MD--WV--PA
WV	36190	Hagerstown, MD--WV--PA
WV	40753	Huntington, WV--KY--OH
WV	59275	Morgantown
WV	93592	Weirton--Steubenville, WV--OH--PA
WV	94726	Wheeling, WV--OH
WV	676772	Parkersburg, WV--OH
WY	14482	Casper
WY	16237	Cheyenne

Congressional Districts

Recipient_ID	Cong_District	Description
1	1	Congressional District 1
1	2	Congressional District 2
1	3	Congressional District 3
1	4	Congressional District 4
1	5	Congressional District 5
1	6	Congressional District 6
1	7	Congressional District 7
2	0	Congressional District (at Large)
4	1	Congressional District 1

4	2	Congressional District 2
4	3	Congressional District 3
4	4	Congressional District 4
4	5	Congressional District 5
4	6	Congressional District 6
4	7	Congressional District 7
4	8	Congressional District 8
5	1	Congressional District 1
5	2	Congressional District 2
5	3	Congressional District 3
5	4	Congressional District 4
6	1	Congressional District 1
6	2	Congressional District 2
6	3	Congressional District 3
6	4	Congressional District 4
6	5	Congressional District 5
6	6	Congressional District 6
6	7	Congressional District 7
6	8	Congressional District 8
6	9	Congressional District 9
6	10	Congressional District 10
6	11	Congressional District 11
6	12	Congressional District 12
6	13	Congressional District 13
6	14	Congressional District 14
6	15	Congressional District 15
6	16	Congressional District 16
6	17	Congressional District 17
6	18	Congressional District 18
6	19	Congressional District 19
6	20	Congressional District 20
6	21	Congressional District 21
6	22	Congressional District 22
6	23	Congressional District 23
6	24	Congressional District 24
6	25	Congressional District 25
6	26	Congressional District 26
6	27	Congressional District 27
6	28	Congressional District 28
6	29	Congressional District 29
6	30	Congressional District 30
6	31	Congressional District 31
6	32	Congressional District 32
6	33	Congressional District 33
6	34	Congressional District 34
6	35	Congressional District 35
6	36	Congressional District 36

6	37	Congressional District 37
6	38	Congressional District 38
6	39	Congressional District 39
6	40	Congressional District 40
6	41	Congressional District 41
6	42	Congressional District 42
6	43	Congressional District 43
6	44	Congressional District 44
6	45	Congressional District 45
6	46	Congressional District 46
6	47	Congressional District 47
6	48	Congressional District 48
6	49	Congressional District 49
6	50	Congressional District 50
6	51	Congressional District 51
6	52	Congressional District 52
6	53	Congressional District 53
8	1	Congressional District 1
8	2	Congressional District 2
8	3	Congressional District 3
8	4	Congressional District 4
8	5	Congressional District 5
8	6	Congressional District 6
8	7	Congressional District 7
9	1	Congressional District 1
9	2	Congressional District 2
9	3	Congressional District 3
9	4	Congressional District 4
9	5	Congressional District 5
10	0	Congressional District (at Large)
11	98	Delegate District (at Large)
12	1	Congressional District 1
12	2	Congressional District 2
12	3	Congressional District 3
12	4	Congressional District 4
12	5	Congressional District 5
12	6	Congressional District 6
12	7	Congressional District 7
12	8	Congressional District 8
12	9	Congressional District 9
12	10	Congressional District 10
12	11	Congressional District 11
12	12	Congressional District 12
12	13	Congressional District 13
12	14	Congressional District 14
12	15	Congressional District 15
12	16	Congressional District 16

12	17	Congressional District 17
12	18	Congressional District 18
12	19	Congressional District 19
12	20	Congressional District 20
12	21	Congressional District 21
12	22	Congressional District 22
12	23	Congressional District 23
12	24	Congressional District 24
12	25	Congressional District 25
13	1	Congressional District 1
13	2	Congressional District 2
13	3	Congressional District 3
13	4	Congressional District 4
13	5	Congressional District 5
13	6	Congressional District 6
13	7	Congressional District 7
13	8	Congressional District 8
13	9	Congressional District 9
13	10	Congressional District 10
13	11	Congressional District 11
13	12	Congressional District 12
13	13	Congressional District 13
15	1	Congressional District 1
15	2	Congressional District 2
16	1	Congressional District 1
16	2	Congressional District 2
17	1	Congressional District 1
17	2	Congressional District 2
17	3	Congressional District 3
17	4	Congressional District 4
17	5	Congressional District 5
17	6	Congressional District 6
17	7	Congressional District 7
17	8	Congressional District 8
17	9	Congressional District 9
17	10	Congressional District 10
17	11	Congressional District 11
17	12	Congressional District 12
17	13	Congressional District 13
17	14	Congressional District 14
17	15	Congressional District 15
17	16	Congressional District 16
17	17	Congressional District 17
17	18	Congressional District 18
17	19	Congressional District 19
18	1	Congressional District 1
18	2	Congressional District 2

18	3	Congressional District 3
18	4	Congressional District 4
18	5	Congressional District 5
18	6	Congressional District 6
18	7	Congressional District 7
18	8	Congressional District 8
18	9	Congressional District 9
19	1	Congressional District 1
19	2	Congressional District 2
19	3	Congressional District 3
19	4	Congressional District 4
19	5	Congressional District 5
20	1	Congressional District 1
20	2	Congressional District 2
20	3	Congressional District 3
20	4	Congressional District 4
21	1	Congressional District 1
21	2	Congressional District 2
21	3	Congressional District 3
21	4	Congressional District 4
21	5	Congressional District 5
21	6	Congressional District 6
22	1	Congressional District 1
22	2	Congressional District 2
22	3	Congressional District 3
22	4	Congressional District 4
22	5	Congressional District 5
22	6	Congressional District 6
22	7	Congressional District 7
23	1	Congressional District 1
23	2	Congressional District 2
24	1	Congressional District 1
24	2	Congressional District 2
24	3	Congressional District 3
24	4	Congressional District 4
24	5	Congressional District 5
24	6	Congressional District 6
24	7	Congressional District 7
24	8	Congressional District 8
25	1	Congressional District 1
25	2	Congressional District 2
25	3	Congressional District 3
25	4	Congressional District 4
25	5	Congressional District 5
25	6	Congressional District 6
25	7	Congressional District 7
25	8	Congressional District 8

25	9	Congressional District 9
25	10	Congressional District 10
26	1	Congressional District 1
26	2	Congressional District 2
26	3	Congressional District 3
26	4	Congressional District 4
26	5	Congressional District 5
26	6	Congressional District 6
26	7	Congressional District 7
26	8	Congressional District 8
26	9	Congressional District 9
26	10	Congressional District 10
26	11	Congressional District 11
26	12	Congressional District 12
26	13	Congressional District 13
26	14	Congressional District 14
26	15	Congressional District 15
27	1	Congressional District 1
27	2	Congressional District 2
27	3	Congressional District 3
27	4	Congressional District 4
27	5	Congressional District 5
27	6	Congressional District 6
27	7	Congressional District 7
27	8	Congressional District 8
28	1	Congressional District 1
28	2	Congressional District 2
28	3	Congressional District 3
28	4	Congressional District 4
29	1	Congressional District 1
29	2	Congressional District 2
29	3	Congressional District 3
29	4	Congressional District 4
29	5	Congressional District 5
29	6	Congressional District 6
29	7	Congressional District 7
29	8	Congressional District 8
29	9	Congressional District 9
30	0	Congressional District (at Large)
31	1	Congressional District 1
31	2	Congressional District 2
31	3	Congressional District 3
32	1	Congressional District 1
32	2	Congressional District 2
32	3	Congressional District 3
33	1	Congressional District 1
33	2	Congressional District 2

34	1	Congressional District 1
34	2	Congressional District 2
34	3	Congressional District 3
34	4	Congressional District 4
34	5	Congressional District 5
34	6	Congressional District 6
34	7	Congressional District 7
34	8	Congressional District 8
34	9	Congressional District 9
34	10	Congressional District 10
34	11	Congressional District 11
34	12	Congressional District 12
34	13	Congressional District 13
35	1	Congressional District 1
35	2	Congressional District 2
35	3	Congressional District 3
36	1	Congressional District 1
36	2	Congressional District 2
36	3	Congressional District 3
36	4	Congressional District 4
36	5	Congressional District 5
36	6	Congressional District 6
36	7	Congressional District 7
36	8	Congressional District 8
36	9	Congressional District 9
36	10	Congressional District 10
36	11	Congressional District 11
36	12	Congressional District 12
36	13	Congressional District 13
36	14	Congressional District 14
36	15	Congressional District 15
36	16	Congressional District 16
36	17	Congressional District 17
36	18	Congressional District 18
36	19	Congressional District 19
36	20	Congressional District 20
36	21	Congressional District 21
36	22	Congressional District 22
36	23	Congressional District 23
36	24	Congressional District 24
36	25	Congressional District 25
36	26	Congressional District 26
36	27	Congressional District 27
36	28	Congressional District 28
36	29	Congressional District 29
37	1	Congressional District 1
37	2	Congressional District 2

37	3	Congressional District 3
37	4	Congressional District 4
37	5	Congressional District 5
37	6	Congressional District 6
37	7	Congressional District 7
37	8	Congressional District 8
37	9	Congressional District 9
37	10	Congressional District 10
37	11	Congressional District 11
37	12	Congressional District 12
37	13	Congressional District 13
38	0	Congressional District (at Large)
39	1	Congressional District 1
39	2	Congressional District 2
39	3	Congressional District 3
39	4	Congressional District 4
39	5	Congressional District 5
39	6	Congressional District 6
39	7	Congressional District 7
39	8	Congressional District 8
39	9	Congressional District 9
39	10	Congressional District 10
39	11	Congressional District 11
39	12	Congressional District 12
39	13	Congressional District 13
39	14	Congressional District 14
39	15	Congressional District 15
39	16	Congressional District 16
39	17	Congressional District 17
39	18	Congressional District 18
40	1	Congressional District 1
40	2	Congressional District 2
40	3	Congressional District 3
40	4	Congressional District 4
40	5	Congressional District 5
41	1	Congressional District 1
41	2	Congressional District 2
41	3	Congressional District 3
41	4	Congressional District 4
41	5	Congressional District 5
42	1	Congressional District 1
42	2	Congressional District 2
42	3	Congressional District 3
42	4	Congressional District 4
42	5	Congressional District 5
42	6	Congressional District 6
42	7	Congressional District 7

42	8	Congressional District 8
42	9	Congressional District 9
42	10	Congressional District 10
42	11	Congressional District 11
42	12	Congressional District 12
42	13	Congressional District 13
42	14	Congressional District 14
42	15	Congressional District 15
42	16	Congressional District 16
42	17	Congressional District 17
42	18	Congressional District 18
42	19	Congressional District 19
44	1	Congressional District 1
44	2	Congressional District 2
45	1	Congressional District 1
45	2	Congressional District 2
45	3	Congressional District 3
45	4	Congressional District 4
45	5	Congressional District 5
45	6	Congressional District 6
46	0	Congressional District (at Large)
47	1	Congressional District 1
47	2	Congressional District 2
47	3	Congressional District 3
47	4	Congressional District 4
47	5	Congressional District 5
47	6	Congressional District 6
47	7	Congressional District 7
47	8	Congressional District 8
47	9	Congressional District 9
48	1	Congressional District 1
48	2	Congressional District 2
48	3	Congressional District 3
48	4	Congressional District 4
48	5	Congressional District 5
48	6	Congressional District 6
48	7	Congressional District 7
48	8	Congressional District 8
48	9	Congressional District 9
48	10	Congressional District 10
48	11	Congressional District 11
48	12	Congressional District 12
48	13	Congressional District 13
48	14	Congressional District 14
48	15	Congressional District 15
48	16	Congressional District 16
48	17	Congressional District 17

48	18	Congressional District 18
48	19	Congressional District 19
48	20	Congressional District 20
48	21	Congressional District 21
48	22	Congressional District 22
48	23	Congressional District 23
48	24	Congressional District 24
48	25	Congressional District 25
48	26	Congressional District 26
48	27	Congressional District 27
48	28	Congressional District 28
48	29	Congressional District 29
48	30	Congressional District 30
48	31	Congressional District 31
48	32	Congressional District 32
49	1	Congressional District 1
49	2	Congressional District 2
49	3	Congressional District 3
50	0	Congressional District (at Large)
51	1	Congressional District 1
51	2	Congressional District 2
51	3	Congressional District 3
51	4	Congressional District 4
51	5	Congressional District 5
51	6	Congressional District 6
51	7	Congressional District 7
51	8	Congressional District 8
51	9	Congressional District 9
51	10	Congressional District 10
51	11	Congressional District 11
53	1	Congressional District 1
53	2	Congressional District 2
53	3	Congressional District 3
53	4	Congressional District 4
53	5	Congressional District 5
53	6	Congressional District 6
53	7	Congressional District 7
53	8	Congressional District 8
53	9	Congressional District 9
54	1	Congressional District 1
54	2	Congressional District 2
54	3	Congressional District 3
55	1	Congressional District 1
55	2	Congressional District 2
55	3	Congressional District 3
55	4	Congressional District 4
55	5	Congressional District 5

55	6	Congressional District 6
55	7	Congressional District 7
55	8	Congressional District 8
56	0	Congressional District (at Large)
60	98	Delegate District (at Large)
66	98	Delegate District (at Large)
69	98	Delegate District (at Large)
72	98	Resident Commissioner District (at Large)
78	98	Delegate District (at Large)

Appendix B – NBI Number Relocation Spreadsheet

Steps for Creating and Submitting the Relocation Spreadsheet

1. **Identify projects for which your State will provide relocation instructions:** Review projects for your State in the first tab of the “Bridge Relocation Worksheets”. This spreadsheet is being provided along with this State Preparation Guide. The sample below shows three NBI numbers sharing the same program code/improvement type within the same FMIS project. Your State can provide conversion instructions for all, some, or none of such projects. Projects where your State is likely to change the project agreement using FMIS 5.0 (not including Close or Withdraw) are good candidates for providing relocation instructions.

Sample from “Bridge Projects with Shared Improvement Type/Program Code”

STATE FIPS	PROJ_NO	NBI_STRUCTURE_NO	PROGRAM_CODE	IMPROVEMENT_TYPE
1	0000001	999999	C240	14
1	0000001	888888	C240	14
1	0000001	777777	C240	14

2. **Identify Project Details:** Assume the project AL 0000001 above has three detail lines, two of which match the shared program code/improvement type C240/14. The State needs to provide instructions on how to associate bridges 999999, 888888, and 777777 with the funds on detail lines 1 and 2, since the program code/improvement type for these lines matches these three NBI numbers.

Project Detail Lines on AL 0000001

DETAIL #	PROGRAM_CODE	IMPROVEMENT_TYPE	FEDERAL FUNDS
01	C240	14	\$500.00
02	C240	14	\$1000.00
03	CXYZ	17	\$400.00

3. **Create the Relocation Spreadsheet:** A sample from the State’s relocation instructions spreadsheet appears below. Your State’s relocation instructions need to contain the same columns depicted in this sample, and must conform to rules a. through d. which appear below the sample. The second tab of the “Bridge Relocation Worksheets” contains a template that can be used as a starting point for your State’s relocation spreadsheet.

Sample Relocation Instructions

ST FIPS	PROJ_NO	NBI #	PROGRAM CODE	IMPROVEMENT TYPE	DETAIL #	PERCENT OF FUNDS
1	0000001	888888	C240	14	1	100.00
1	0000001	777777	C240	14	2	40.00

1	0000001	888888	C240	14	2	22.52
1	0000001	999999	C240	14	2	37.48

- a. Percent of funds for each detail line must total 100%. The Sample Instructions above show the two detail lines for project AL 0000001:
 - i. 100% of funds for line 1 are assigned to NBI number 888888.
 - ii. The funds from line 2 are to be split among NBI numbers 777777, 888888, and 999999. The sum of the percentages assigned to each of these three bridges totals 100%.
- b. The percent of funds applies to all fund amounts, including AC, State, local, private, non-monetary, and "other". The \$400 in federal funds from detail line 2 will be associated with NBI number 777777, because the percent of funds from the State instructions is 40% and total federal funds on the line is \$1000. Percent of funds will be applied to all other fund amounts in the same manner.
- c. The State must include all detail lines within a project which reference a shared program code/improvement type. If the project above contained three or more detail lines that shared program code/improvement type C240/14, then all such lines must be included in the relocation spreadsheet.
- d. All shared program code/improvement types within a project must be addressed. The project in the example below has two program code/improvement types that are shared by more than one bridge. If the State includes this project in its relocation spreadsheet, then all detail lines referencing C240/14 and C240/47 must be included on the spreadsheet.

STATE FIPS	PROJ_NO	NBI_STRUCTURE_NO	PROGRAM_CODE	IMPROVEMENT_TYPE
1	5000001	999999	C240	14
1	5000001	888888	C240	14
1	5000001	777777	C240	47
1	5000001	888888	C240	47

4. **Verify Relocation Results in FMIS 5.0** – Once the FMIS 5.0 test database is available in February/March 2014 you will be able to submit your State’s relocation spreadsheet so that you can review your relocation results in FMIS 5.0. More detailed instructions regarding how to submit your spreadsheet and review results will be available prior to when the FMIS 5.0 test database becomes available.
5. **Updates to your State’s Relocation Instructions Spreadsheet:** Since FMIS is a production system, the projects requiring conversion instructions will change over time. The “Bridge Projects with Shared Improvement Type/Program Code” spreadsheet will be updated quarterly following its initial release. It will be distributed to the States through the Division Offices and will also be posted to the FMIS User News and Information (FUNI) web site, which can be reached using the Help menu in production FMIS. States have the option to revise and resubmit their NBI relocation spreadsheets in response to these quarterly updates. Your State must submit a best and final relocation spreadsheet prior to FHWA’s migration of data from current FMIS to FMIS 5.0. A cutoff date for this final submission is TBD.