

**U. S. Department of Energy
Facilities Information Management System
Request for Change
Change Request #: 21-04**

Requestor Name:	Cindy Hunt	Date:	1/11/2021	Affiliation:	
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Program Office:	Office of Asset Management (MA-50)			Contractor	
Proposed Change:	<p>Revise the applicability and definitions of existing data elements as well as the definition of existing Usage Codes applicable to bridges, tunnels, and culverts necessary to support implementation of DOE O 437.1, Bridge and Tunnel Management issued December 11,2020 (the Order).</p> <p>The attachment details for the following proposed revisions-</p> <ol style="list-style-type: none"> 1. Revise <u>Applicability</u> for the following 7 <u>Data Elements</u>: No of Lanes on Structure, Safety Inspection Date, Safety Inspection Frequency, Special Inspection Date, Special Inspection Frequency, Underwater Inspection Date, Underwater Inspection Frequency 2. Revise the <u>Definition</u> of the following 2 <u>Data Elements</u>: Safety Inspection Date, Safety Inspection Frequency 3. Revise the <u>Definition</u> of the following 7 <u>Usage Codes</u>: 1168 PUBLIC ACCESS BRIDGE (WALKING), 1169 CONTROLLED ACCESS BRIDGE (WALKING), 1468 PUBLIC ACCESS BRIDGE (TRAINS), 1469 CONTROLLED ACCESS BRIDGE (TRAINS), 1768 PUBLIC ACCESS BRIDGE (VEHICULAR), 1769 CONTROLLED ACCESS BRIDGE (VEHICULAR), 2629 CULVERT. 4. Revise the <u>Name</u> of the following 5 <u>Usage Codes</u>: 1168 PUBLIC ACCESS BRIDGE (WALKING), 1169 CONTROLLED ACCESS BRIDGE (WALKING), 1468 PUBLIC ACCESS BRIDGE (TRAINS), 1469 CONTROLLED ACCESS BRIDGE (TRAINS), 1471 TUNNELS (TRAINS), 5. Include the following usage codes in FIMS Standard Report 015 - Bridge Safety Inspection Report: 1168, 1169, 1171, 1468, 1469, 1471, 1768, 1769, 1771, 1772, 2629 				

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Justification:	<p>Updating FIMS data elements and requirements to include a minimum number of new data elements leverages the Department's corporate real property inventory system to-</p> <ul style="list-style-type: none"> • integrate requirements for bridge and tunnel management with existing operating and management procedures for real property, • monitor requirement fulfillment, • ensure that information and data supporting the Department's external reporting or implementation of bridge and tunnel management requirements is validated and timely, and • institutionalize data reporting, data tracking, and records management on a commonly accessible system. <p>Background: Requirements of DOE O 437.1 apply to-</p> <ul style="list-style-type: none"> • vehicle bridges both public and controlled-access, railroad bridges, pedestrian bridges including elevated covered walkways, culverts assigned Usage Code 2629 in the Facilities Information Management System (FIMS), and vehicle tunnels. • all DOE elements except for the Deputy Administrator for Naval Reactors, the Federal Energy Regulatory Commission, and the Power Marketing Administrations.
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FAC Remarks:	<p>02/16/2021 – The FAC gave a conditional recommendation to proceed provided the change request was sent out to all Sites for review and comment.</p> <p>03/10/2021 – Change Request feedback was received by MA-50. No comments were received on the scope of the changes proposed. Per FAC request, MA-50 revised the change request to include Update Frequency for each new data element or revised data element. Therefore, in accordance with the FAC's last action, the proposed changes are FAC recommended.</p>
OAM Remarks:	
FDDC Remarks:	06/24/2021 – FDDC Approved
Implemented:	08/03/2021 – Implemented into FIMS 3.21

Attachment 1
FIMS Changes Proposed to Align with
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1. Revise **Applicability** for the following Data Elements:

Data Element Name	From:	To:
No of Lanes on Structure	Required for DOE Owned OSF's with Usage Code 1768 (Public Access Bridges, Vehicular) and 1769 (Controlled Access Bridges, Vehicular)	Required for OSF's (all Ownerships) with Usage Code 1768, 1769, and 2629
Safety Inspection Date	Required for DOE Owned OSF where the Usage Code is 1468, 1469, 1768 Optionally used for DOE Owned OSF inspected to the standards stated in the definition where the Usage Code is 1168, 1169, 1769, 2629 Optional for OSF's (all Ownerships) where the Usage Code is 1171 or 1471	Required for OSF's (all Ownerships) where the Usage Code is 1168, 1169, 1468, 1469, 1768, 1769, 1771, 1772, and 2629
Safety Inspection Frequency	Required for DOE Owned OSF where the Usage Code is 1468, 1469, 1768 Optionally used for DOE Owned OSF inspected to the standards stated in the definition where the Usage Code is 1168, 1169, 1769, 2629 Optional for OSF's (all Ownerships) where the Usage Code is 1171 or 1471	Required for OSF's (all Ownerships) where the Usage Code is 1168, 1169, 1468, 1469, 1768, 1769, 1771, 1772, and 2629
Special Inspection Date	Required for DOE Owned OSF where the Usage Code is 1468, 1469, 1768 Optionally used for DOE Owned OSF inspected to the standards stated in the definition where the Usage Code is 1168, 1169, 1769, 2629 Optional for OSF's (all Ownerships) where the Usage Code is 1171 or 1471	Required for OSF's (all Ownerships) where the Usage Code is 1168, 1169, 1468, 1469, 1768, 1769, 1771, 1772, and 2629

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Special Inspection Frequency	Required for DOE Owned OSF where the Usage Code is 1468, 1469, 1768 Optionally used for DOE Owned OSF inspected to the standards stated in the definition where the Usage Code is 1168, 1169, 1769, 2629 Optional for OSF's (all Ownerships) where the Usage Code is 1171 or 1471	Required for OSF's (all Ownerships) where the Usage Code is 1168, 1169, 1468, 1469, 1768, 1769, 1771, 1772, and 2629
Underwater Inspection Date	Required for DOE Owned OSF where the Usage Code is 1468, 1469, 1768 Optionally used for DOE Owned OSF inspected to the standards stated in the definition where the Usage Code is 1168, 1169, 1769, 2629	Required for OSF's (all Ownerships) where the Usage Code is 1168, 1169, 1468, 1469, 1768, 1769, and 2629
Underwater Inspection Frequency	Required for DOE Owned OSF where the Usage Code is 1468, 1469, 1768 Optionally used for DOE Owned OSF inspected to the standards stated in the definition where the Usage Code is 1168, 1169, 1769, 2629	Required for OSF's (all Ownerships) where the Usage Code is 1168, 1169, 1468, 1469, 1768, 1769, and 2629

2. Revise the **Definition** of the following **Data Element**:

From:	To:
Safety Inspection Date	Routine Inspection Date
The date of the most recent safety inspection conducted in accordance with designated inspection standards. a) <u>Required reporting</u> – inspection standard and frequency: a. 1468 – Public Access Bridge (Trains) and 1469 – Controlled Access Bridge (Trains) , with Status = Operating, Standby or Outgranted i. 49 CFR Part 237 ii. One inspection per calendar year,	The date of the most recent Routine Inspection conducted in accordance with DOE O 437.1, Bridge and Tunnel Management, or documented PSO-established equivalencies . The Routine Inspection Date field must be changed to represent the most current inspection date within thirty (30) days of inspection completion.

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From:	To:
<p>iii. Public access vehicle bridges with a Structure Length of more than 20 feet (6.1 meter) are included in the National Bridge Inventory (NBI) regardless of operational Status</p> <p>For required inspections, the Safety Inspection Date field must be changed to represent the most current inspection date within thirty (30) days of inspection completion.</p> <p>b. 1768 – Public Access Bridge (Vehicular), regardless of Status</p> <ul style="list-style-type: none"> i. 23 CFR 650 ii. Regular intervals not to exceed twenty-four (24) months iii. Public access vehicle bridges with a Structure Length of more than 20 feet (6.1 meter) are included in the National Bridge Inventory (NBI) regardless of operational Status <p>For required inspections, the Safety Inspection Date field must be changed to represent the most current inspection date within thirty (30) days of inspection completion.</p> <p>b) <u>Optional reporting</u> – inspection standard and frequency:</p> <ul style="list-style-type: none"> a. 1168 – Public Access Bridge (Walking) and 1169 – Controlled Access Bridge (Walking), Includes elevated walkways <ul style="list-style-type: none"> i. A customized inspection plan based on American Association of State Highway and Transportation Officials (AASHTO) MBE-1, Manual for Bridge Evaluation ii. Regular intervals not to exceed twenty-four (24) months b. 1769 – Controlled Access Bridge (Vehicular) <ul style="list-style-type: none"> i. 23 CFR 650 ii. Regular intervals not to exceed twenty-four (24) months c. 2629 – Culverts 	<p>POC for bridge, tunnel, and culvert safety inspection policy: Cindy Hunt, 202-586-4539, Cindy.Hunt@hq.doe.gov</p> <p>Update Frequency: concurrent with each routine inspection (see <i>Routine Inspection Frequency data field</i>)</p>

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<p>From:</p> <ul style="list-style-type: none"> i. FHWA-IP-86-2, Culvert Inspection Manual ii. Regular intervals not to exceed twenty-four (24) months <p>For optional reporting, record the Safety Inspection Date only if inspection was in compliance with designated standard. Leave the date blank when designated inspection standards are not used.</p> <p>POC for Safety Inspection Policy: Cindy Hunt, 202-586-4539, Cindy.Hunt@hq.doe.gov</p>	<p>To:</p>
Safety Inspection Frequency	Routine Inspection Frequency
<p>The number of months between routine inspections.</p>	<p>The number of months between routine inspections.</p> <p style="color: red;">The Safety Inspection Frequency field must be changed to represent the most current inspection interval within thirty (30) days of new determination.</p> <p style="color: red;">Enter '0' for an asset in "Shutdown" status if no longer inspected IAW DOE O 437.1, Bridge and Tunnel Management.</p> <p style="color: red;">Enter 'X' for assets with a documented, PSO-established exemption.</p> <p style="color: red;">Update Frequency: As needed. Confirm no change concurrent with each routine inspection.</p>

3. Revise the **Definition** of the following **Usage Codes**:

<p>From:</p> <p>1168 PUBLIC ACCESS BRIDGE (WALKING)</p> <p>A bridge used exclusively for walking. A traveler could traverse the bridge without ever passing thru a staffed entry point or presenting identification. This includes elevated walkways, pedestrian footbridges (enclosed or not) that connect buildings. This category does not include vehicular bridges</p>	<p>To:</p> <p>1168 PUBLIC ACCESS BRIDGE (PEDESTRIAN)</p> <p style="color: red;">A structure that carries primarily pedestrian, bicycle, and equestrian traffic but may include light maintenance vehicles over a chasm, waterway, ditch, or other obstacle or convey pedestrian traffic from one building or structure to another including enclosed walkways. A traveler could traverse the</p>
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<p>From:</p> <p>that have sidewalks; bridges used by both vehicles and pedestrians should be counted in the vehicular category.</p>	<p>To:</p> <p>bridge without ever passing thru a staffed entry point or presenting identification. This includes-</p> <ul style="list-style-type: none"> • elevated walkways, pedestrian footbridges (enclosed or not) that connect buildings. <p>It does not include-</p> <ul style="list-style-type: none"> • work or machinery platforms, stairways, platforms, boardwalks, or docks or similar type structures; • vehicular bridges that have sidewalks. Bridges used by both vehicles and pedestrians should be counted in the vehicular category.
<p>1169 CONTROLLED ACCESS BRIDGE (WALKING)</p> <p>A bridge used exclusively for walking. A traveler must pass through a staffed entry point and present proper identification to traverse this bridge. This includes elevated walkways, pedestrian footbridges (enclosed or not) that connect buildings. This category does not include vehicular bridges that have sidewalks; bridges used by both vehicles and pedestrians should be counted in the vehicular category.</p>	<p>1169 CONTROLLED ACCESS BRIDGE (PEDESTRIAN)</p> <p>A structure that carries primarily pedestrian, bicycle, and equestrian traffic but may include light maintenance vehicles over a chasm, waterway, ditch, or other obstacle or convey pedestrian traffic from one building or structure to another including enclosed walkways. A traveler must pass through a staffed entry point and present proper identification to traverse this bridge. This includes-</p> <ul style="list-style-type: none"> • elevated walkways, pedestrian footbridges (enclosed or not) that connect buildings. <p>It does not include-</p> <ul style="list-style-type: none"> • work or machinery platforms, stairways, platforms, boardwalks, or docks or similar type structures; • vehicular bridges that have sidewalks. Bridges used by both vehicles and pedestrians should be counted in the vehicular category.
<p>1468 PUBLIC ACCESS BRIDGE (TRAINS)</p> <p>A structure including supports erected over a depression or an obstruction, such as water, highway, or railway, and having a track for carrying moving loads and used exclusively by trains. A traveler could traverse the bridge</p>	<p>1468 PUBLIC ACCESS BRIDGE (RAILROAD)</p> <p>Any structure with a deck, regardless of length, which supports one or more railroad tracks, OR any other undergrade structure with an individual <u>span</u> length of 10 feet or more located at such a depth that it is</p>

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From:	To:
<p>without ever passing thru a staffed entry point or presenting identification.</p> <p>Note: Structure Length is defined with Usage Code, 1768 PUBLIC ACCESS BRIDGE (VEHICULAR).</p>	<p>affected by live loads. A traveler could traverse the bridge without ever passing thru a staffed entry point or presenting identification.</p>
1469 CONTROLLED ACCESS BRIDGE (TRAINS)	1469 CONTROLLED ACCESS BRIDGE (RAILROAD)
<p>A structure including supports erected over a depression or an obstruction, such as water, highway, or railway, and having a track for carrying moving loads and used exclusively by trains. A traveler must pass thru a staffed entry point and present proper identification to traverse this bridge.</p> <p>Note: Structure Length is defined with Usage Code, 1768 PUBLIC ACCESS BRIDGE (VEHICULAR).</p>	<p>Any structure with a deck, regardless of length, which supports one or more railroad tracks, OR any other undergrade structure with an individual <u>span</u> length of 10 feet or more located at such a depth that it is affected by live loads. A traveler must pass thru a staffed entry point and present proper identification to traverse this bridge.</p>
1768 PUBLIC ACCESS BRIDGE (VEHICULAR)	1768 PUBLIC ACCESS BRIDGE (VEHICULAR)
<p>A structure including supports erected over a depression or an obstruction, such as water, highway or railway, and having a passageway for carrying traffic or other moving loads. A traveler could traverse the structure <u>without</u> ever passing thru a staffed entry point or presenting identification.</p> <p>The <u>Structure Length</u> of a bridge or culvert is the length of roadway, railway, or walkway supported on the structure.</p> <p>For bridges, the length should be measured along the centerline (i.e. parallel) of the roadway, railway, or walkway back-to-back of backwalls of abutments or spring lines of arches.</p> <p>[Structure Length illustrations included in the FIMS DED are not shown]</p>	<p>A structure including supports erected over a depression or an obstruction, such as water, highway, or railway, and having a passageway for carrying traffic or other moving loads. A traveler could traverse the structure <u>without</u> ever passing through a staffed entry point or presenting identification. This includes:</p> <ul style="list-style-type: none"> • assets of ANY <u>Structure Length</u> with a deck, superstructure, and substructure, and • culverts with a Structure Length of more than 20LF. <p>Public access vehicle bridges with a Structure Length of more than 20 feet (6.1 meters) are included in the National Bridge Inventory unless permanently closed (i.e. in Shutdown Status and Excess Indicator is “Yes”).</p> <p>The <u>Structure Length</u> of a bridge or culvert is the length of roadway, railway, or walkway supported on the structure.</p>

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From:	To:
	For bridges, the length should be measured along the centerline (i.e. parallel) of the roadway, railway, or walkway back-to-back of backwalls of abutments or spring lines of arches.
1769 CONTROLLED ACCESS BRIDGE (VEHICULAR)	1769 CONTROLLED ACCESS BRIDGE (VEHICULAR)
<p>A structure including supports erected over a depression or an obstruction, such as water, highway, or railway, and having a passageway for carrying traffic or other moving loads. A traveler must pass thru a staffed entry point and present identification to traverse this structure.</p> <p>Note: Structure Length is defined with Usage Code, 1768 PUBLIC ACCESS BRIDGE (VEHICULAR).</p>	<p>A structure including supports erected over a depression or an obstruction, such as water, highway, or railway, and having a passageway for carrying traffic or other moving loads. A traveler must pass thru a staffed entry point and present identification to traverse this structure. This includes:</p> <ul style="list-style-type: none"> • assets of <u>ANY Structure Length</u> with a deck, superstructure, and substructure, and • culverts with a Structure Length of more than 20LF. <p>Controlled access vehicle bridges are not included in the National Bridge Inventory.</p> <p>Note: Structure Length is defined with Usage Code, 1768 PUBLIC ACCESS BRIDGE (VEHICULAR).</p>
2629 CULVERT	2629 CULVERT
<p>A transverse structure, pipe, or series of multiple pipes constructed to convey water or utilities under a road or railway.</p> <p>Before choosing this usage code, determine Structure Length and Opening Area of the structure, pipe, or series of multiple pipes. See Appendix C of the FIMS User’s Guide for a definition of Structure Length included with the definition of Usage Code 1768-Public Access Bride (Vehicular).</p> <p>See Note 1 for a definition of Opening Area.</p> <p>Use the following criteria in the order listed to identify the usage code for a structure,</p>	<p>A transverse structure, pipe, or series of multiple pipes, box(es), or arch(s) constructed to convey water or utilities under a road or railway.</p> <p>Before choosing this usage code, determine Structure Length and Opening Area of the structure, pipe, or series of multiple openings. See Appendix C of the FIMS User’s Guide for a definition of Structure Length included with the definition of Usage Code 1768-Public Access Bride (Vehicular).</p> <p>See Note 1 for a definition of Opening Area.</p> <p>Use the following criteria in the order listed to identify the usage code for a structure,</p>

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From:	To:
<p>pipe, or series of multiple pipes that is under a road:</p> <ul style="list-style-type: none"> • Structure Length greater than or equal to 20 feet - apply Usage Code 1768 or 1769, • Opening Area less than 20 square feet - include as part of the infrastructure system by which the assets are maintained and managed (see Note 2), • All other cases - record as an individual property record in FIMS and apply Usage Code 2629. <p>Use the following criteria in the order listed to identify the usage code for a structure, pipe, or series of multiple pipes that is under a railway:</p> <ul style="list-style-type: none"> • Structure Length greater than or equal to 10 feet - apply Usage Code 1468 or 1469, • Opening Area less than or equal to 20 square feet - include as part of the infrastructure system by which the assets are maintained and managed (see Note 2), • All other cases - record as an individual property record in FIMS and apply Usage Code 2629. <p>When applying Usage Code 2629, the unit of measure is Culvert Length. See Note 3 for a definition.</p> <p>FHWA-IP-86-2, Culvert Inspection Manual provides industry inspection standards for culverts.</p> <p>Note 1: [defines Opening Area] Note 2: [identifies other infrastructure systems] Note 3: [defines Culvert Length]</p>	<p>pipe, or series of multiple openings that is under a road:</p> <ul style="list-style-type: none"> • Structure Length greater than or equal to 20 feet - apply Usage Code 1768 or 1769, • Opening Area less than 20 square feet - include as part of the infrastructure system by which the assets are maintained and managed (see Note 2), • All other cases - record as an individual property record in FIMS and apply Usage Code 2629. <p>Use the following criteria in the order listed to identify the usage code for a structure, pipe, or series of multiple pipes that is under a railway:</p> <ul style="list-style-type: none"> • Structure at grade - apply Usage Code 1468 or 1469, • Structure with an individual <u>span</u> length of 10 feet or more located at such a depth that it is affected by live loads - apply Usage Code 1468 or 1469, • Opening Area less than or equal to 20 square feet - include as part of the infrastructure system by which the assets are maintained and managed (see Note 2), • All other cases - record as an individual property record in FIMS and apply Usage Code 2629. <p>When applying Usage Code 2629, the unit of measure is Culvert Length. See Note 3 for a definition.</p> <p>[No change to Notes currently included in the FIMS DED]</p>

4. Revise the **Name** of the following **Usage Codes**:

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From:	To:
1168 PUBLIC ACCESS BRIDGE (WALKING)	1168 PUBLIC ACCESS BRIDGE (PEDESTRIAN)
1169 CONTROLLED ACCESS BRIDGE (WALKING)	1169 CONTROLLED ACCESS BRIDGE (PEDESTRIAN)
1468 PUBLIC ACCESS BRIDGE (TRAINS)	1468 PUBLIC ACCESS BRIDGE (RAILROAD)
1469 CONTROLLED ACCESS BRIDGE (TRAINS)	1469 CONTROLLED ACCESS BRIDGE (RAILROAD)
1471 TUNNELS (TRAINS)	1471 TUNNELS (RAILROAD)

5. Include the following usage codes in FIMS Standard Report 015 - Bridge Safety Inspection Report -
- 1168 PUBLIC ACCESS BRIDGE (PEDESTRIAN)
 - 1169 CONTROLLED ACCESS BRIDGE (**PEDESTRIAN**)
 - 1171 TUNNELS (**PEDESTRIAN**)
 - 1468 PUBLIC ACCESS BRIDGE (**RAILROAD**)
 - 1469 CONTROLLED ACCESS BRIDGE (**RAILROAD**)
 - 1471 TUNNELS (**RAILROAD**)
 - 1768 PUBLIC ACCESS BRIDGE (VEHICULAR)
 - 1769 CONTROLLED ACCESS BRIDGE (VEHICULAR)
 - 1771 TUNNELS (CONTROLLED ACCESS VEHICULAR)
 - 1772 TUNNELS (PUBLIC ACCESS VEHICULAR)
 - 2629 CULVERT