

Course Overview, Course Goal, and Objectives

Welcome to the Public Assistance Codes and Standards course.

This course discusses how Codes and Standards affect Applicant projects in the Public Assistance program. The course will provide an overview regarding the application of Applicant-adopted and uniformly practiced codes and standards and how they are considered through Public Assistance Program grants. Americans with Disabilities Act considerations in disaster recovery shall also be addressed. By the end of the course, State, Local, Tribal, and Territorial Applicants and Recipients will be able to understand how codes and standards and the Americans with Disabilities Act apply to disaster recovery within the Public Assistance Grant Program.

Upon completion of this course, the participants will be able to:

- Define codes and standards considerations, policy, and applicability within the Public Assistance process
- Explain the Americans with Disabilities Act, define policy, and identify the law's application within the Public Assistance Grant Program
- Identify required documentation for compliance with codes and standards policy and Americans with Disabilities Act
- Provide crosswalk regarding guidance and applicability for codes and standards and the Americans with Disabilities Act with regards to Environmental and Historic Preservation, Section 406 Hazard Mitigation, and Flood Insurance grant compliance requirements

[Select this link to access the Public Assistance acronym list.](#)

Lesson 1 Overview and Objectives

This lesson provides a high-level overview of Applicant adopted codes and standards. Federal Law, The Americans with Disabilities Act will also receive overview. Applicability to Federal grant funding for each consideration will be highlighted.

At the end of this lesson, participants will be able to:

- Identify administrative requirements of the course
- State the goals and objectives of the course
- Identify the five eligibility requirements for codes and standards
- Summarize how codes and standards impact the scoping and costing of Applicant project(s)

Public Assistance Funding Eligibility Criteria (1 of 2)

FEMA provides Public Assistance funding to restore facilities on the basis of pre-disaster design and function, which may include conformity with current applicable codes, specifications, and standards. FEMA also provides Public Assistance funding for costs related to Federal Americans with Disabilities Act accessibility requirements when restoring facilities.



Public Assistance Funding Eligibility Criteria (2 of 2)

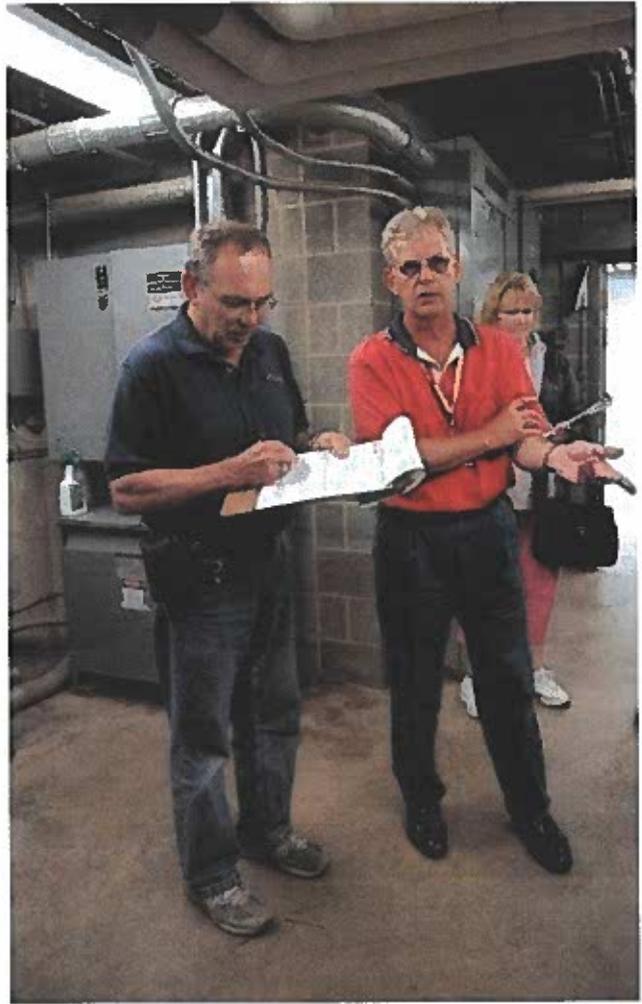
Following a disaster, facility repairs and new construction may require upgrades triggered by codes and standards. Upgrades required by Federal, State, Territorial, Tribal, or local repair or replacement codes and standards are generally only eligible if the code and standard:

- Applies to the type of restoration required
- Is appropriate to the pre-disaster use of the facility
- Is reasonable, in writing, formally adopted by the State, Territorial, Tribal, or local government, and implemented by the Applicant on or before the declaration date, OR is a legal Federal requirement
- Applies uniformly
- Was enforced during the time it was in effect

We'll review each of these further in Lesson 2.

Scoping and Costing

Once project eligibility has been analyzed, the next step in the Public Assistance grant process is scoping and costing to validate Work to be Completed projects for final processing. Codes and standards shape the scoping and costing of projects, with the required upgrades often changing the pre-disaster condition.



Code and Standard Upgrade Example

The Applicant's building was flooded and sustained considerable damage, including the building front which was completely torn off during the event. The original building front consisted of a wooden porch and steps, but no accessibility ramp. Americans with Disabilities Act codes and standards require that the rebuild include a handicap accessible ramp and allow the Applicant to upgrade the building front from wood to concrete.



Meeting Codes and Standards

Applicants are responsible for meeting required codes and standards in order to receive project funding. To ensure codes and standards are being met, Applicants must confer with appropriate parties who can confirm compliance requirements, such as Fire Marshall, jurisdictional engineer and/or building official, the United States Army Corps of Engineers, etc. The Applicant can discuss any issues with the Program Delivery Manager assigned to their project.

Lesson 1 Summary

In this lesson, we introduced the five eligibility requirements for Public Assistance funding codes and standards:

- Applies to the type of restoration required
- Is appropriate to the pre-disaster use of the facility
- Is reasonable, in writing, formally adopted by the State, Territorial, Tribal, or local government, and implemented by the Applicant on or before the declaration date, OR is a legal Federal requirement
- Applies uniformly
- Was enforced during the time it was in effect

We also covered the effect that Public Assistance funding has on project scoping and costing, as well as the Applicant steps required to ensure that projects meet codes and standards.

Lesson 2 Overview and Objectives

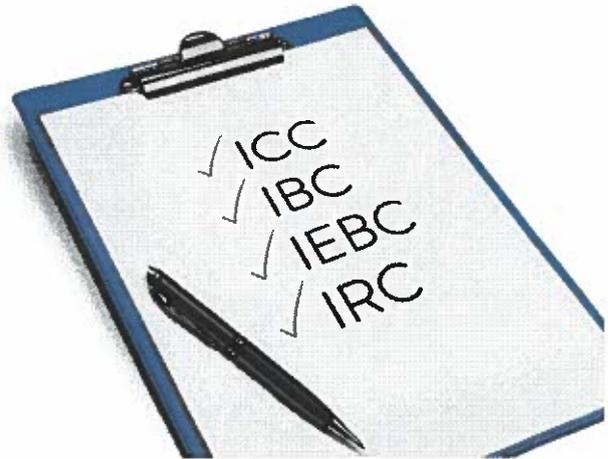
This lesson depicts FEMA's minimum standard policy for repaired, replaced, or improved facilities.

At the end of this lesson, participants will be able to:

- Define FEMA's minimum standards policy
- Describe the applicability and process of the minimum standards policy for Public Assistance funded projects involving repairs or reconstruction of buildings
- Define what is considered a Code
- Define what is considered a Standard
- Describe and define the Americans with Disabilities Act

Minimum Standard Policy (1 of 3)

The Public Assistance program requires the integration and use of the natural hazard-resistant codes and standards and related provisions of the International Building Code, the International Existing Building Code, and the International Residential Code as a minimum design standard, but only when triggered for eligible building restoration projects.



Codes are the rules that must be followed when restoring or replacing buildings. Standards outline the detailed approach for meeting those codes.

Minimum Standard Policy (2 of 3)

The minimum design standard includes natural hazard-resistant design provisions for hazards such as tornado, wind, seismic, and flood as identified in the International Code Council's International Building Code, the International Existing Building Code, and the International Residential Code, regardless of the type of incident that caused the damage.



In accordance with these codes and standards, the Risk Category of the eligible building determines the applicable tornado, wind, seismic, flood, snow, ice, and rain loads. FEMA provides Public Assistance funding for the eligible increased cost associated with meeting these codes and standards when triggered at the cost-share for the disaster.

Minimum Standard Policy (3 of 3)

Generally, the International Building Code, the International Existing Building Code, and the International Residential Code apply when a building:

- Is substantially damaged
 - Damage of any origin sustained by a structure whereby the cost of restoring the structure to its before-damaged condition would equal or exceed 50 percent of the market value of the structure before the damage occurred.
- Suffered substantial structural damage
 - Significant damage to the vertical elements of the lateral force-resisting system or the vertical gravity load-carrying components in accordance with the International Building Code or International Existing Building Code.
- Is eligible for replacement or involves new construction in accordance with 44 Code of Federal Regulations Part 206.226(f)
 - Disaster-related damage exceeds 50 percent of the cost to replace a facility to its pre-disaster design and function



Minimum Standard Policy Triggers

The determination of whether a code and standard is triggered may be made by:

- A building official or inspector
- The Recipient's or Applicant's registered design professional
- Other appropriate and qualified individual

FEMA will generally accept this determination, but may review the determination to ensure it is consistent with the aforementioned codes and standards and other Public Assistance policies. FEMA may deviate from this policy in circumstances where utilization of the codes and standards would create an extraordinary burden on the Applicant or would otherwise be inappropriate for the facility.

Locally Adopted Natural Hazard-Resistant Building Codes and Standards

FEMA generally requires that the Applicant incorporate the minimum codes and standards in the design of eligible repair, replacement, or construction of a building even if they exceed local codes and standards or in instances where communities have not adopted a building code and standard.

If the International Building Code, the International Existing Building Code, and the International Residential Code have been adopted under another name (for example the California Building Code) and it meets the natural hazard-resistant provisions in the model codes, then FEMA will consider the adopted codes and standards compliant with the minimum codes and standards requirement.

FEMA will evaluate the eligibility of locally adopted natural hazard-resistant building codes and standards that exceed those referenced in the International Building Code, the International Existing Building Code, and the International Residential Code.

Natural Hazard-Specific Requirements (1 of 2)

When triggered by the eligible scope of work, natural hazard-specific requirements include, but are not limited to, the following:

- In areas where tornado shelter design wind speeds are 250 mph or greater, the Applicant must incorporate a storm shelter or safe room (designed to International Code Council 500 standards) for elementary and secondary schools with an occupant load of 50



or more, Emergency Operations Centers, 911 call stations, fire stations, rescue stations, ambulance stations, and police stations

- For wind-resistant requirements, the Applicant must incorporate applicable wind-resistant design and construction standards contained in the International Building Code, the International Existing Building Code, and the International Residential Code and its referenced standards

Natural Hazard-Specific Requirements (2 of 2)

When triggered by the eligible scope of work, natural hazard-specific requirements include, but are not limited to, the following (continued):

- For seismic-resistant requirements, the Applicant must incorporate applicable seismic-resistant design and construction standards contained in the International Building Code, the International Existing Building Code, and the International Residential Code and its referenced standards
- For flood-resistant requirements, the Applicant must incorporate applicable flood-resistant design and construction standards contained in the International



Building Code, the International Existing Building Code, and the International Residential Code and its referenced standards

- Example: Elevating a public building to prevent unnecessary disruption of commerce, access, and public service during times of flooding

FEMA also provides Public Assistance funding for costs associated with meeting the load requirements in the most recent International Building Code, International Existing Building Code, and International Residential Code for snow, rain, and ice loads.

Implementing FEMA's Minimum Standard Policy

All zones, even if not designated hazard prone, have design requirements. Applicants should apply natural hazard-resistant provisions for all hazards regardless of the type that cause the damage. To implement FEMA's minimum standard policy, Applicants must first identify current local codes and standards by contacting the local Building Code Inspector and Floodplain Manager and determine if they exceed those of the most recent published edition of the International Code Council's codes.

Next, the Applicant must determine if the structure is located in a hazard prone area for wind, seismic activity, tornado, or flood. FEMA will provide a registered design professional or other qualified individual at the Applicant's request to help determine if the hazard resistance design provisions of the most recent International Code Council codes and standards are triggered. This will identify which codes and standards must be applied to the repair or reconstruction.

Americans with Disabilities Act

The Americans with Disabilities Act requires that any public, residential, or workplace facility be accessible to and usable by 251 disabled persons. FEMA provides Public Assistance funding for costs related to Federal Americans with Disabilities Act

accessibility requirements. Criteria for Americans with Disabilities Act-related funding is further discussed in Lesson 4.

Residential can be defined as government-owned or operated housing and certain privately-owned facilities that provide housing and are subject to the Americans with Disabilities Act and its accessibility requirements. Government-owned or operated facilities may include public housing, student and faculty housing, employee housing, nursing homes, temporary housing provided in emergencies, and social service facilities such as homeless shelters and halfway houses.



Lesson 2 Summary

In this lesson, we:

- Defined FEMA's minimum policy
- Described the applicability and process of the minimum standards policy for Public Assistance funded projects involving repairs or reconstruction of buildings
- Defined what is considered a Code
- Defined what is considered a Standard
- Described and defined the Americans with Disabilities Act

In the following lesson, we'll discuss requirements for demonstrating compliance with Applicant adopted codes and standards.

Lesson 3 Overview and Objectives

This lesson provides details on eligibility requirements for codes and standards and how Applicants document project compliance or certification of compliance with applicable codes and standards.

At the end of this lesson, participants will be able to:

- Identify if applicable codes and standards meet eligibility requirements
- Describe the necessary steps to document project compliance or show certification of compliance with all codes and standards

Meeting Code and Standard Eligibility Requirements

As we discussed in Lesson 1, there are five eligibility requirements that Federal, State, Territorial, Tribal, or local codes and standards must meet in order for the Applicant to receive Public Assistance funding. They are:

- Applies to the type of restoration required
- Is appropriate to the pre-disaster use of the facility
- Is reasonable, in writing, formally adopted by the State, Territorial, Tribal, or local government, and implemented by the Applicant on or before the declaration date, OR is a legal Federal requirement
- Applies uniformly
- Was enforced during the time it was in effect



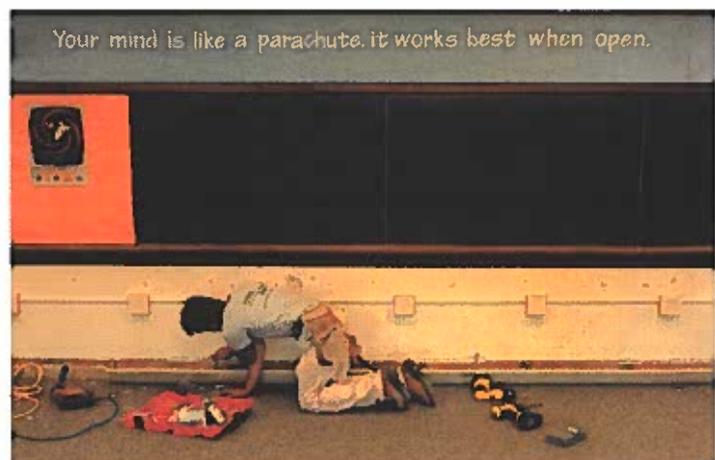
Let's look at each of these requirements individually.

Applies to the Types of Restoration Required (1 of 3)

Codes and standards must apply to the type of restoration required. Codes and standards for new construction are often different than codes and standards for repair work.

If FEMA determines a facility is eligible for replacement, compliance with current codes and standards for new construction is eligible. However, if FEMA determines a facility is **not** eligible for replacement, only code required upgrades applicable to repairs are eligible.

A code or standard may include a trigger that requires:



- Upgrades to all structural components
- In addition to upgrading all structural components, bringing the non-structural components into conformance with current codes and standards for new construction

Applies to the Types of Restoration Required (2 of 3)

If an upgrade to an entire structural or non-structural system within a building is triggered, the upgrade is only eligible if it is necessary to repair the damaged element.

To determine if an update is reasonable, FEMA evaluates the type and extent of damage in relation to the upgrade requested.



Applies to the Types of Restoration Required (3 of 3)

Example of Code and Standard Not Applicable to Restoration Type

An Applicant requests Public Assistance funding for the repair of a damaged building and the construction of a parking garage. The Applicant states that while there was no parking garage prior to the incident, zoning codes and other local ordinances require one. Because parking improvements have no relationship to the disaster-related repairs, they do not apply to the type of restoration required and are not eligible.

Similarly, if a code and standard that applies to new construction or the rehabilitation of an entire road requires the construction of paved shoulders, drainage swales, and berms, the construction of these improvements is not eligible for a project



involving repairs to discrete damaged portions of the road shoulders.

Appropriate to Pre-Disaster Use

Codes and standards must be appropriate to the pre-disaster use of the facility. FEMA determines the eligibility of code required upgrades based on the facility's pre-disaster design or actual use at the time of the disaster.

If the facility is serving an alternate function at the time of the incident, FEMA will evaluate the cost of upgrades to the pre-disaster use of the facility and compare that to the cost of the alternate use of the facility. The eligible upgrade is whichever is least costly.



Appropriate to Pre-Disaster Use: Example of Non-Compliance

The following is an example of a code or standard that is NOT reasonable:

The original design of a facility was a warehouse; however, the Applicant was using the facility as a classroom before the incident. Restoring the facility as a classroom in conformance with classroom codes and standards would not be eligible if it would be more costly than restoring the facility as a warehouse in accordance with code and standards applicable to a warehouse.



Must be Reasonable

Codes and standards must be reasonable. To determine reasonableness, FEMA:

- Examines the general reasonableness of the code and standard and the trigger for application of the code and standard
- Determines whether the upgrade and trigger relate to the type of restoration required by the damage and whether the upgrade and trigger are justified based on the extent of damage
- Considers whether the upgrade and the trigger are technically defensible from an engineering perspective
- Determines whether the cost of the upgrade is reasonable



FEMA may determine a very large upgrade based on a very low trigger to be unreasonable.

Must Be Reasonable: Example of Non-Compliance

Installation of a code and standard required new sprinkler system throughout a building is eligible if that building is replaced. However, installation of that sprinkler system is not eligible if the eligible work only involved repair of the building, even if required by the code and standard, unless it is reasonable based on the eligible repair.



Written, Formally Adopted, and Implemented (1 of 2)

Codes and standards must be in writing, formally adopted by the State, Territorial, Tribal, or local government, and implemented by the Applicant on or before the declaration date, OR be a legal Federal requirement, such as a requirement of the Americans with Disabilities Act. An appropriate legislative body or regulatory authority within the jurisdiction must:

- Approve the code and standard



- Make it a matter of public record
- Formally incorporate it into the building code or other applicable ordinance

Written, Formally Adopted, and Implemented (2 of 2)

The code and standard must apply to the facility in question. For example, if a State has jurisdiction over a particular type of work and formally adopts a code and standard related to that work, a Tribal or local government in that State does not necessarily have had to formally adopt the code and standard for it to apply to its facility. The Tribal or local government meets the above requirement as long as it shows that it implements the code and standard consistently.

FEMA does not recognize codes and standards adopted by a private non-profit organization specifically for its facilities when determining whether compliance with codes and standards is eligible. FEMA also does not accept codes and standards adopted by agencies or divisions of State, Territorial, or local governments that are not authorized to set codes and standards within the broad governmental jurisdiction of the State, Territorial, or local government.

Written, Formally Adopted, and Implemented: Example of Non-Compliance

The following is an example of a code or standard that is NOT written, formally adopted, and implemented or a federal requirement:

FEMA approves funding to replace a culvert that was washed out by a flood. The State Natural Resources Department denies the Applicant's permit application for replacing the culvert, and recommends the Applicant construct a bridge instead. The decision of the permitting officials is discretionary and not based on a written and formally adopted code and standard; therefore, the bridge construction is not eligible.



Applies Uniformly (1 of 2)

Codes and standards must apply uniformly to all similar types of facilities, whether private or public, eligible or ineligible, in the Applicant's jurisdiction or (if applicable) in a particular hazard zone within its jurisdiction.

For FEMA to find that a code and standard and its triggers are uniformly applied, the code and standard must meet all of the following conditions. The code and standard must:

- Provide for uniform accountability in the event of noncompliance
- Not be subject to discretionary enforcement by public officials
- Not allow for selective application

Applies Uniformly (2 of 2)

A code and standard must meet three tests to demonstrate that it is not selectively applied:

- The upgrade is generally triggered regardless of the cause of damage and is also triggered for renovations or improvements
- The code and standard is applied regardless of the source of funding for the work
- The code and standard is not applied selectively based on the availability of funds

Applies Uniformly: Example of Non-Compliance

A local jurisdiction has authority over all facilities, both public and private. A statewide code and standard imposes seismic retrofit requirements for all public buildings, but not for privately owned buildings. The seismic retrofitting is not eligible as it does not apply uniformly to all similar types of facilities within the Applicant's jurisdiction.



Must Be Enforced

The code and standard must have been enforced during the time it was in effect. FEMA may provide public assistance funding for costs related to an upgrade based on confirmation of previous enforcement and in reliance on continued enforcement. If the local jurisdiction subsequently violates this criterion, no further work to comply with the code and standard is eligible within the local jurisdiction.

If FEMA determines a jurisdiction has had no reasonable opportunity to enforce the code and standard, the upgrade may be eligible. A reasonable opportunity to enforce may be lacking when a code and standard is new or when a facility affected by the code and standard has not been damaged during the time the code and standard was in effect.

Must Be Enforced: Example of Non-Compliance

The following is an example of a code or standard that was NOT enforced during the time it was in effect:

An Applicant requests funding to upgrade the foundation of several damaged trailers based on a code requirement applying to repairs to trailers and installation of new trailers. The Applicant installed several new trailers after the incident and did not use the code and standard required foundation. The upgrades to the foundation of the damaged trailers are not eligible because the Applicant did not enforce the standard.

Example: Hazard County Bridge

The following is an example of the application of Applicant adopted and uniformly practiced codes and standards.

On a declared disaster, Hazard County experienced significant flooding. As a result of the event, a wooden one-lane bridge washed away during the event. As the bridge was destroyed, a new bridge needed to be constructed as a replacement. The County requested replacement of the bridge with a two-lane concrete bridge.

The replacement of the one lane wooden bridge with a two-lane concrete bridge is a repair above and beyond the pre-existing condition in both design and capacity. However, in accordance with the five codes and standards criteria, the County was able to show that the repair applies to the type of restoration required, and is appropriate to the pre-disaster use of the facility.

The county was also able to show that in 2008, the County Board adopted resolution that all single lane or two lane wooden bridges would be replaced with two lane concrete bridges once unstable or in a status of requiring replacement. They were also able to document that the adopted code and standard has been applied to all bridges in the jurisdiction since resolution adoption in 2008, and has been enforced as a practice since implementation.

Certification and Documentation of Compliance

Applicants must provide proof of compliance with applicable codes and standards. Acceptable forms of proof include, but are not limited to:

- A valid certificate of occupancy from the local building department, that supports that the project was constructed or repaired as designed
- Elevation certificates
- Letters of compliance
- Upon completion of the Project, if the Public Assistance Minimum Standards policy is triggered, a written certification by a registered design professional that the natural hazard-resistant design elements comply with International Building Code, International Existing Building Code, and International Residential Code requirements

Non-compliance may result in denial or de-obligation of public assistance funding for the facility. Therefore, the Applicant should work with its local building department and any other authorities having jurisdiction to ensure compliance with this and other Federal, State, Territorial, Tribal, and local government code and standard requirements.

Lesson 3 Summary

In this lesson, we:

- Identified if applicable codes and standards meet eligibility requirements.
- Described the necessary steps to document project compliance or show certification of compliance with all codes and standards.

In the next lesson, we'll discuss other Federal requirements that apply to codes and standards.

[Select this link for a full image description.](#)

Lesson 4 Overview and Objectives

This lesson provides details on codes and standards related to the Americans with Disabilities Act, environmental and historic preservation, and floodplains, as well as the triggers and examples for each type of code.

At the end of this lesson, participants will be able to:

- Explain how the Americans with Disabilities Act applies to Public Assistance funded projects and when the act is triggered
- Explain how environmental and historic preservation conditions apply to Public Assistance funded projects, when the considerations are triggered, and how they impact Codes and Standards and/or Americans with Disabilities Act improvements to damaged elements
- Explain how Section 406 Hazard Mitigation considerations apply to Public Assistance funded projects, when those are triggered, and how they impact Codes

and Standards and/or Americans with Disabilities Act improvements to damaged elements

- Explain how the floodplain conditions apply to Public Assistance funded projects, when those are triggered, and how they impact Codes and Standards and/or Americans with Disabilities Act improvements to damaged elements

The Americans with Disabilities Act

The Americans with Disabilities Act gives Federal civil rights and prohibits discrimination against people with disabilities. The Americans with Disabilities Act applies to employment, communications, transportation, public accommodations, telecommunications, and State and local government services.

As stated in Lesson 2, the Americans with Disabilities Act requires that any public, residential, or workplace facility be accessible to and usable by disabled persons. FEMA provides Public Assistance funding for costs related to Federal Americans with Disabilities Act accessibility requirements when repairing or replacing facilities following a disaster.



Facilities Eligible for Replacement

When a facility is eligible for replacement, FEMA provides Public Assistance funding for compliance with reasonable accessibility requirements triggered by Americans with Disabilities Act in newly constructed facilities. FEMA provides Public Assistance funding regardless of whether the facility was in compliance prior to the incident, provided the Applicant was not cited for an Americans with Disabilities Act violation.

A new facility is not required to be fully compliant with the Americans with Disabilities Act if the Applicant can demonstrate that it is structurally impractical to meet the requirements.

For some private nonprofit organizations, exceptions are available for installation of elevators in small buildings less than three stories or less than 3,000 square feet per story. These exceptions do not apply to any publicly owned or operated facility.

Facilities Eligible for Repair

For Americans with Disabilities Act relevant repairs (repairs that affect or could affect the usability of the facility by the disabled) FEMA provides public assistance funding for required Americans with Disabilities Act upgrades that have a reasonable and technically supportable relationship to the damaged elements of the facility.

In addition, when disaster-related and Americans with Disabilities Act-relevant repairs are made to a primary function area of the facility, FEMA provides Public Assistance funding to make the path of travel to the primary function area accessible to the maximum extent feasible, including facilities that serve the primary function area. Facilities that serve the primary function area include restrooms, telephones, drinking fountains, pathways, and similar service facilities. Pathways include internal and external paths of travel, such as hallways, sidewalks, and parking lots.

Americans with Disabilities Act—Relevant Repair Costs (1 of 2)

Public Assistance funding to make the path of travel and service facilities to a repaired primary function area accessible may not exceed 20 percent of the total cost of the repair of the primary function area in an Americans with Disabilities Act compliant manner.

For calculation purposes, the total costs of the primary function area repair also include the repair costs of the roof, heating, ventilation, and air conditioning system, mechanical rooms, janitorial closets, locker rooms, and private offices directly associated with the repair of the primary function area.

If Americans with Disabilities Act-relevant repairs are made to areas that also happen to provide access to and usability of the repaired primary function area (damaged walls, stairs, corridors, and restrooms), the cost of those repairs are eligible costs as non-primary function areas and are not applied to the 20 percent capped amount.

Americans with Disabilities Act—Relevant Repair Costs (2 of 2)

When 20 percent of the capped amount is not adequate to meet Americans with Disabilities Act-accessible path-of-travel and service facility requirements, the Applicant must apply Americans with Disabilities Act access requirements to the maximum extent possible with the limited funds. The Applicant should make limited changes in the following order of priority:

- Accessible entrance
- Accessible route to the altered area

- At least one accessible restroom for each sex or single unisex restroom
- Phones
- Drinking fountain
- Other elements such as parking, storage, and alarms

Additional Americans with Disabilities Act—Relevant Repair Eligibility Considerations

If the Applicant was notified of being in violation of an Americans with Disabilities Act law or building code and standard prior to the incident and was required to bring the facility into compliance, then triggered accessibility requirements related to the violation are not eligible.

Repairs to non-primary function areas do not trigger the path of travel and service facility requirements. However, the Applicant must complete the repairs to the non-primary function area in an Americans with Disabilities Act compliant manner.

The Applicant is not required by Americans with Disabilities Act to reconstruct non-damaged areas of a partially damaged facility for Americans with Disabilities Act access unless they are the path of travel or service facility to a repaired primary function area requiring Americans with Disabilities Act relevant repairs.

Additional Americans with Disabilities Act—Non-Relevant Repairs

If the Applicant triggers Americans with Disabilities Act requirements by engaging in repairs that are not eligible, the cost of those Americans with Disabilities Act changes are also not eligible.

Some special provisions apply when Americans with Disabilities Act requirements threaten or destroy the historic significance of qualified historic buildings and facilities. FEMA will address these provisions during its consultation with the State Historic Preservation Officer or Tribal Historic Preservation Officer and will incorporate them into the agreement regarding the repairs to the building.

Non-Relevant Accessibility Triggers

Only Americans with Disabilities Act relevant repairs, referred to as "alterations" in the Americans with Disabilities Act, trigger accessibility requirements; not all repairs are Americans with Disabilities Act-relevant repairs.

Americans with Disabilities Act- Relevant Repairs

Flooring

Walls

Partitions

Load-bearing elements

Non-Americans with Disabilities Act- Relevant Repairs

Windows

Hardware

Controls

Electrical outlets

Signage

Repair of facades (drywall, plaster, facial brick)

Accessibility Triggers

Activities such as normal maintenance, re-roofing, painting or wallpapering, asbestos removal, or changes to mechanical and electrical systems are not Americans with Disabilities Act relevant repairs, unless they affect the usability of, or access to, an area containing a primary function.



Environmental and Historic Preservations Codes and Standards

FEMA uses all practical means and measures to protect, restore and enhance the quality of the environment, to avoid or minimize adverse impacts to the environment, and to preserve historic, cultural and natural aspects of national heritage, as required by Federal

environmental and historic preservation policies and laws.

All proposed projects must align with these policies and laws as they relate to codes and standards.



Federal Historic Preservation Requirements

Section 106 of the National Historic Preservation Act requires FEMA to consider the effects a project will have on historic properties. Facilities listed in, or that meet the criteria to be listed in, the National Register of Historic Places are exempt from many of the requirements set for non-historic facilities. For instance, if an applicable code and standard requires repair to a historic facility in a certain manner, costs associated with work to comply with that code and standard are eligible for public assistance funding, even if repair costs exceed replacement costs.



State, Territorial, or Tribal Historic Preservation Requirements

If a State, Territorial, or Tribal historic building code and standard requires that specific work be performed, FEMA evaluates the code and standard using the eligibility criteria. Most State historic building codes and standards encourage code officials to allow less intrusive alternatives to requirements of the prevailing codes and standards, but do not require any particular work to be performed. As a result, the codes and standards usually fail to meet the eligibility criteria.

Example of Historic Preservation

One example of a historic preservation project is the roads through Gettysburg, Pennsylvania.

Due to their historic significance, the roads must remain and, in the event of damage, be repaired to, two lanes rather than the four lane roads surrounding the borough.



406 Hazard Mitigation

If a damaged facility is eligible for permanent repairs, it may also be eligible for additional funding under Section 406 of the Robert T. Stafford Act for cost-effective measures that will prevent future similar damage to the facility. These measures are called hazard mitigation measures. FEMA strongly encourages Applicants to consider hazard mitigation opportunities as a part of the repair and restoration of facilities.

While basic funding will return a facility to its pre-disaster design, hazard mitigation measures will improve on the pre-disaster design. Upgrades required to meet applicable codes and standards are part of the basic eligible restoration work, not hazard mitigation measures.

Section 406 Hazard Mitigation funding provides discretionary authority to fund mitigation measures in conjunction with the repair of the disaster-damaged facilities, so is limited to declared counties and eligible damaged facilities.

Examples of Section 406 Hazard Mitigation

Examples of reasonable mitigation measures include:

- Constructing floodwalls around damaged facilities
- Installing new drainage facilities (including culverts) along a damaged road
- Dry flood proofing both damaged and undamaged buildings that contain components of a system that are functionally interdependent (i.e., cases where the entire system is jeopardized if any one component of the system fails)
- Slope stabilization to protect facilities:
 - Riprap
 - Retaining walls or gabion baskets
 - Geotextile fabric
- Use of disaster-resistant materials for power poles

Floodplain Management and Wetland Protection (1 of 2)

Additional codes and standards that may affect Applicant projects relate to floodplain management. Executive Order 11988, Floodplain Management, requires Federal agencies to minimize or avoid activity that adversely affects floodplains.

FEMA publishes its implementing regulations for Executive Order 11988 in 44 Code of Federal Regulations Part 9, Floodplain Management and Protection of the Wetlands. These regulations set forth the policy, procedures, and responsibilities to implement and enforce the Executive Order, including the decision-making process.



Floodplain Management and Wetland Protection (2 of 2)

Codes and standards are always subject to environmental and historic preservation review. If the project is in a wetland or 100-yr floodplain, an extended 8-step floodplain reconnaissance review is required. Applicants can access the IS-1016 Environmental and Historic Preservation Compliance/Considerations course for more information.



Minimum Requirement for Structures in a Floodplain (1 of 3)

When providing Public Assistance funding for a project in or impacting a floodplain or wetland, the following requirements apply.

For any structure (walled or roofed buildings, including mobile homes and gas or liquid storage tanks) that is built, replaced, or Substantially Improved in a Special Flood Hazard Area, the Applicant must, at a minimum, either elevate or floodproof the lowest floor (including the basement) to or above the 100-year base flood elevation.



Minimum Requirement for Structures in a Floodplain (2 of 3)

If the structure houses critical actions and is in the 500-year floodplain, the Applicant must elevate the lowest floor (including the basement) to or above the 500-year flood level. Again, if the structure is non-residential, the Applicant may opt to floodproof to the required level instead of elevating.

Further, if the structure is substantially improved in a Coastal High Hazard Area, the Applicant must elevate the facility to the base flood elevation (the 500-year level for critical actions) (including wave height) on open works (walls columns, piers, piles, etc.) and anchor it properly. New construction is prohibited in the coastal high hazard area.



Note: Hazard Mitigation 406 funding may not be used to trigger Substantially Improved requirements.

Minimum Requirement for Structures in a Floodplain (3 of 3)

Substantial Improvement means any repair, reconstruction or other improvement of a structure or facility, which has been damaged in excess of, or the cost of which equals or exceeds, 50% of the market value of the structure or replacement cost of the facility (including all "public facilities" as defined in the Disaster Relief Act of 1974) (a) before the

repair or improvement is started, or (b) if the structure or facility has been damaged and is proposed to be restored, before the damage occurred.

If a facility is an essential link in a larger system, the percentage of damage will be based on the relative cost of repairing the damaged facility to the replacement cost of the portion of the system which is operationally dependent on the facility.

The term "substantial improvement" does not include any alteration of a structure or facility listed on the National Register of Historic Places or a State Inventory of Historic Places.

Requirement for Communities Participating in the National Flood Insurance Program (1 of 2)

A community that participates in the National Flood Insurance Program must adopt and enforce a floodplain management ordinance that meets or exceeds the minimum National Flood Insurance Program requirements.

The ordinance must contain construction requirements for new construction or substantial improvement of buildings located in a Special Flood Hazard Area.

In addition to other requirements, the ordinance must require that new or substantially improved buildings be elevated so that the lowest floor is at or above the base flood elevation or floodproofed to a level equal to or above the base flood elevation (some communities have more restrictive ordinances that require elevation or floodproofing to greater levels.)



Requirement for Communities Participating in the National Flood Insurance Program (2 of 2)

Work required for compliance with the floodplain ordinance is eligible provided the ordinance meets the eligibility criteria for codes and standards and the substantial improvements are disaster-related repairs. If

the cost to repair a facility in accordance with the floodplain ordinance is greater than the cost to replace the facility in accordance with the ordinance, the eligible cost is capped at the replacement cost.



Lesson 4 Summary

In this lesson, we:

- Explained how the Americans with Disabilities Act applies to Public Assistance funded projects and when the act is triggered
- Explained how environmental and historic preservation conditions apply to Public Assistance funded projects, when the considerations are triggered, and how they impact codes and standards and/or Americans with Disabilities Act improvements to damaged elements
- Explained how Section 406 Hazard Mitigation considerations apply to Public Assistance funded projects, when those are triggered, and how they impact codes and standards and/or Americans with Disabilities Act improvements to damaged elements
- Explained how the floodplain conditions apply to Public Assistance funded projects, when those are triggered, and how they impact codes and standards and/or Americans with Disabilities Act improvements to damaged elements

In the next lesson, we'll review the main points of course.

[Select this link for a full image description.](#)

Lesson 5 Overview and Objectives

This lesson will review the course objectives. Participants will take a Post-Course Assessment at its conclusion.

At the end of this lesson, participants will be able to summarize the content of this course.

[Select this link for a full image description.](#)

Course Objectives Review

The course provided an overview of codes and standards of Federal, State, Tribal, Territorial, or local, and how they influence Applicant work done under Public Assistance Program grants. State, Local, Tribal, and Territorial Applicants and Recipients should now be able to understand how codes and standards and the Americans with Disabilities Act influence the Public Assistance Program, and what documentation Applicants needs to show that their project complies with these regulations and policies.

In this course, participants learned how to:

1. Define Codes and Standards in the Public Assistance process
2. Outline the current policy on minimum standards
3. Identify required documentation for compliance with codes and standards (to include State, local, Tribal, or Territorial)
4. Explain the Americans with Disabilities Act, Environmental and Historic Preservation, Section 406 Hazard Mitigation, and floodplain impacts on the Public Assistance Process

Lesson 1 Objectives

This lesson provides an overview of codes and standards of Federal, State, Tribal, Territorial, or local, and how these influence Applicant work done under Public Assistance Program grants.

In Lesson 1, participants learned how to:

- Identify administrative requirements of the course
- State the goals and objectives of the course
- Identify the five eligibility requirements for Codes and Standards
- Summarize how codes and standards impact the scoping and costing of Applicant project(s)

Lesson 2 Objectives

This lesson depicts FEMA's minimum standard policy for repaired, replaced, or improved facilities.

In Lesson 2, participants learned how to:

- Define FEMA's minimum policy
- Describe the applicability and process of the minimum standards policy for Public Assistance funded projects involving repairs or reconstruction of buildings
- Define what is considered a code
- Define what is considered a standard
- Describe and define the Americans with Disabilities Act

Lesson 3 Objectives

This lesson provides details on eligibility requirements for codes and standards and how Applicants document project compliance or certification of compliance with applicable codes and standards.

In Lesson 3, participants learned how to:

- Identify if applicable codes and standards meet eligibility requirements
- Describe the necessary steps to document project compliance or show certification of compliance with all codes and standards

Lesson 4 Objectives

This lesson provides details on codes and standards related to the Americans with Disabilities Act, environmental and historic preservation, 406 mitigations, and floodplains, as well as the triggers and examples for each type of code.

In Lesson 4, participants learned how to:

- Explain how the Americans with Disabilities Act applies to Public Assistance funded projects and when the act is triggered
- Explain how environmental and historic preservation conditions apply to Public Assistance funded projects, when the considerations are triggered, and how they impact Codes and Standards and/or Americans with Disabilities Act improvements to damaged elements
- Explain how Section 406 Hazard Mitigation considerations apply to Public Assistance funded projects, when those are triggered, and how they impact Codes and Standards and/or Americans with Disabilities Act improvements to damaged elements
- Explain how the floodplain conditions apply to Public Assistance funded projects, when those are triggered, and how they impact Codes and Standards and/or Americans with Disabilities Act improvements to damaged elements

Course Summary

This course provided you with an overview of codes and standards of Federal, State, Tribal, Territorial, or local, and how these influence Applicant work done under Public Assistance Program grants.

State, Local, Tribal, and Territorial Applicants and Recipients should now be able to understand how codes and standards and the Americans with Disabilities Act influence the Public Assistance Program, and what documentation Applicants needs to show that their project complies with these regulations and policies.

[Select this link for a full image description.](#)