Welcome to this California Office of Historic Preservation’s training on the interpretation and application of the Secretary of the Interior’s Standards for the Treatment of Historic Properties, with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings.

Hello, my name is Timothy Brandt. I am a Senior Restoration Architect with the California State Office of Historic Preservation. I will be your guide through this module created for local preservation commissioners and others who want to learn how to interpret and apply the Four Treatments and specifically the Secretary of the Interior’s Standards for the Rehabilitation of Historic Properties.

1.2 Module Overview

I often get questions about the differences between the Four Treatments covered within the Secretary of the Interior’s Standards for the Treatment of Historic Properties, how to apply the Standards for Rehabilitation in particular, and how the Standards apply to specific projects. This course is designed to answer those questions.

The course consists of three modules that will provide you an understanding of the standards and guidelines that can be applied in your own review of historic properties.

Along the way, you will have several opportunities to check your knowledge and assess what you have learned.

In this first module we introduce the Secretary of Interior Standards for the Treatment of Historic Properties and begin a dialog on the Four Treatments and the related standards. We will also discuss who used the treatment standards, how they can be applied and the general philosophy behind the treatments.

Module Two focuses in depth on the four treatments and how to select the appropriate treatment for a variety of scopes of work.

Module three will provide and in-depth look at each of the ten standards for rehabilitation, the most common treatment selected for work on historic properties.

1.3 Origins

The Historic Preservation Act of 1966 made the United States Secretary of the
Interior responsible for developing preservation standards for the country.

In 1976, the Secretary of the Interior’s Standards for the Treatment of Historic Properties were developed as general principles to govern work on a historic resource.

Since that time the National Park Service (or NPS), within the Department of the Interior, has developed standards for almost every type of preservation project, including Preservation, Rehabilitation, Restoration, and Reconstruction.

Each of these four treatments has its own set of Standards that provide an overview of how a property and its character should be looked at and maintained under that specific treatment.

While the Standards for each of these Treatments are relatively brief, each of them is accompanied by lengthier Guidelines.

These Guidelines provide more specific guidance on how to apply each specific Standard in the form of Recommended and Not Recommended actions.

For a definition of each of the treatments, click on the appropriate tab. To read more on the Four Treatments and their Standards and related Guidelines, click on the Resources tab at the top of this screen.

1.4 Who Uses the Standards?

In one form or another, the Standards are used by virtually everyone who works on historic properties in this country. If you have anything to do with the review of historic properties, the Standards are the basis for evaluation, recommendations, and ultimate decisions.

Local historic preservation reviewers use the Standards to evaluate the appropriateness of proposed changes an owner wants to make to improve a historic property, such as work to this residence in Sacramento.

State and local officials use the Standards to review both Federal and nonfederal rehabilitation proposals such as the rehabilitation and adaptive use of the Stanford Mansion in Sacramento.

Federal agencies use the Standards in carrying out projects to preserve historic properties that they own or manage such as maintenance and abatement issues on Hangar One at Moffett Field.

State Historic Preservation offices and the National Park Service use the Standards to determine if rehabilitation work carried out on historic income-producing National Register buildings qualifies as a Certified Rehabilitation eligible to receive federal tax credits such as many of the historic buildings at Fort Baker in Marin County.

1.5 Applying Standards

You can apply the Treatment Standards to buildings, historic districts, structures,
landscape features, sites and environments, objects, and any attached, adjacent, or related new construction.

Examples include: individual buildings such as the Buford House, a bed and breakfast, in Napa; a district such as the Sacramento Railyards; a structure such as the Golden Gate Bridge in San Francisco, the gardens and landscape around Wattles Mansion in Hollywood; building settings and environments within the boundaries of the Presidio in San Francisco; an object such as Sather Gate at UC Berkeley, and; the adaptive reuse of, and an addition to, the Hall of Justice in Sacramento.

1.6 Applying Standards

You can also apply the Treatment Standards to historic properties of all: Types, Sizes, Uses, Styles and Periods, and Materials.

Examples include: a former commercial building, the Young’s Market Company Building in Los Angeles as an example of a building type; the size and scale of a residential property such as the Winter’s House in Sacramento; a 1906 Santa Fe Freight Depot, converted into a new use as an architecture school in Los Angeles; a winery property and buildings representative of an agricultural period of development in Napa County, and; the hollow clay tile assembly used as a building material in the Mission Inn Annex in Riverside.

1.7 Applying Treatment Standards

You may also apply the Treatment Standards to both the exterior and interior of historic buildings depending on the program under which you review a project.

Although most local review authority is limited to the exterior of the building, the review of work on a building’s interior may be warranted when the interior public spaces contribute to the building’s significance.

In this example, the Office of Historic Preservation reviewed work on both the exterior and interior of the Ferry Building located in the Embarcadero Historic District in San Francisco.

The owners rehabilitated the building under the Federal Historic Preservation Tax Incentives program. As a result, all of the proposed work, including the ground floor retail space and the upper office floors, was reviewed for consistency with the Standards for Rehabilitation.

It should be noted that the Treatment Standards do not give specific directions on what has to be done or how to implement a particular scope of work. Their goal is to allow a reviewer to look at an overall project and select the most appropriate Treatment for the work proposed.

While multiple treatments might be implemented on a project, it is recommended that one specific treatment be selected as the overall guidance for the work.
1.8 Philosophy of the Four Treatments

The basic philosophy behind the treatments and their related standards is to do the least amount of harm to a historic property or building as possible whenever you contemplate work.

In brief the Treatments create a hierarchy for work from the least to the greatest intervention and are ordered to:

- Maintain rather than Repair
- Repair rather than Replace
- Preserve rather than Restore
- Restore rather than Reconstruct

Regardless of the Treatment selected, all proposed work should preserve the character and integrity of the historic resource.

1.9 Maintain rather than Repair

The preferred approach is to maintain rather than repair.

By performing regular maintenance such as keeping a building painted, or keeping a building water tight by maintaining gutters and downspouts you will avoid costly repairs and potential replacement in the future due to the deterioration of features and materials.

1.10 Maintain rather than Repair

The second level is to repair rather than replace.

Most times original character defining features can be repaired which will maintain the historic integrity of the property. Only when a feature is beyond repair should you consider replacement. And then it should be done accurately. You can see this approach in this Dutchman repair to the handrail at the Japanese Tea Garden in San Francisco.

Because this railing component was severely deteriorated and the handrail replacement was done to match the original handrail in size, shape, technique, and material, this work is acceptable. It should also be noted that the wood will weather to match the other railing components making the replacement even more compatible.

1.11 Maintain rather than Repair

The third level is to preserve rather than restore.

There are times when, for good reasons, preserving a resource in an arrested state of decay is the preferred treatment. The Chinese Store in Columbia State
Historic Park was in ruins when it was acquired by the state. Its decay is being arrested and the ruins are being preserved through reinforcement and stabilization of the brick walls and other materials. In its preserved state as a ruin, it retains its ability to represent the 1850s and tell part of the story of the Gold Rush period of Columbia’s history.

1.12 Restore Rather Than Reconstruct

The last approach to consider is to restore rather than reconstruct. Reconstruction of a resource is the least desirable treatment, because a reconstructed resource may have the form but lacks the history, the workmanship, and the materials of the original building. However reconstruction may be necessary when portions of original character defining features are lost or missing as in the case of a major fire at the Burkhalter Residence in Los Angeles.

As you can see in the picture on the right, historic features that remained were restored to the extent possible and the features lost to the fire were reconstructed based on physical and historic documentation.

1.13 Character Defining Features

In addition to understanding the philosophy behind the Treatments and their Standards, the ability to identify a building’s character defining features and their contribution to the significance of a property is a key part of your responsibility in reviewing historic properties.

Character defining features are the important elements that contribute to the significance of the property, such as its setting, style and design, materials and details, height and layout, and distinguishing features such as windows, doors, porches and decorative features or spaces.

If you would like more information on recognizing and preserving these features, look at the NPS methodology on identifying the visual aspects of historic buildings by clicking the Resource tab above.

1.14 Final Thoughts

To conclude, the Secretary of the Interior’s Standards for the Treatment of Historic Properties and their related Guidelines are broad documents that provide guidance for a variety of projects and are useful for many different kinds of historic review.

Although they may seem general, their interpretation has been refined over their application to thousands of projects across the nation.

The Treatments and Standards form a positive framework for evaluating and
safeguarding what’s best for our historic resources. They have served the preservation community and the people of the United States well for more than 30 years.

Although there have been disagreements over their application and interpretation, they have proven their usefulness and should continue to do so in the years to come.

1.15 Thank you

This concludes Module 1 of the three modules contained in this course about the Secretary of the Interior’s Standards for the Treatment of Historic Properties.

For additional information and guidance on a number of historic preservation issues, as well as all of the reference materials cited in this module, click on the “Resources” tab at the top of the screen. This will direct you to an OHP web page with a listing of, and links to a variety of related reference materials.
Module 2

This is the script for Module 2 of OHP’s eLearning course *Interpretation and Application of Secretary of the Interior’s Standards for the Treatment of Historic Properties* available online at www.ohp.parks.ca.gov/eLearning.

1.1 Understanding the Four Treatments for Historic Properties - Module 2


Hello, my name is Timothy Brandt. I am a Senior Restoration Architect with the California State Office of Historic Preservation. I will be your guide through this module created for local preservation commissioners and others who want to learn how to interpret and apply the Four Treatments and specifically the Secretary of the Interior’s Standards for the Rehabilitation of Historic Properties.

By the end of this module you will have an understanding of the Four Treatments for Historic Properties.

1.2 How to Choose the Appropriate Treatment

So how do you choose the most appropriate treatment for work on a historic building?

Choosing one of the four treatments requires careful decision making and taking into account a number of other considerations, including:

- A building’s historical significance
- Its physical condition prior to work
- The proposed use
- Any mandated code requirements that may impact the building

This module focuses in depth on the four treatments and how to select the appropriate Treatment for a variety of scopes of work.

In Module 1 we introduced The Secretary of the Interior’s Standards for the Treatment of Historic Properties as the general principles to govern work on historic resources, including Preservation, Rehabilitation, Restoration, and Reconstruction.

The Standards for each of these Treatments are relatively brief; however each of them is accompanied by lengthier Guidelines. The Guidelines provide more specific guidance on how to apply each specific Standard in the form of Recommended and Not Recommended actions.
1.3 Preservation

So let's look at the Four Treatments, beginning with Preservation.

The National Park Service, or NPS, defines Preservation as the act or process of applying measures necessary to sustain the existing form, integrity, and materials of a historic property.

Work, including any preliminary measures to protect and stabilize a property, generally focuses on the ongoing maintenance and repair of historic materials and features rather than extensive replacement and new construction.

The goal of Preservation is to retain a building's existing form, features, and detailing as they evolved over time.

This may be as simple as basic maintenance and repair or may involve preparing a historic structures report, undertaking laboratory testing such as paint and mortar analysis, and hiring conservators to perform sensitive work such as reconstituting interior finishes.

1.4 Preservation - Arrested Decay

Arrested decay is the Preservation Treatment used at Bodie State Historic Park. Buildings remain essentially as they were when the last residents left. To preserve the look of the town at the time it was abandoned, there are no commercial facilities at Bodie; however there is a bookstore and museum within the original Miners Union Hall building. Visitor services are placed outside the perimeter of the park so they do not intrude on the overall character of the town.

Preservation as a treatment emphasizes protection, maintenance, and repair while replacement is minimized. The options for replacement are limited because it is assumed at the outset that the building materials and character defining features are essentially intact and that more of the building's fabric has survived unchanged over time.

1.5 Question 1 of 6

Follow the instructions on the screen to select your answer. Click the next button to continue through the questions.

Retaining an original 19th century building and its early 20th century landscaping—is this scope of work appropriate under the Preservation Treatment?

Yes, by selecting Preservation as a treatment, all features would be retained and protected.
1.6 Question 2 of 6

Scraping, sanding, and repainting historic windows—is this scope of work appropriate?
Yes, basic maintenance and repair is appropriate work under Preservation.

1.7 Question 3 of 6

Constructing a new addition to accommodate visitor services and keeping the new use out of the preserved house—is this scope of work appropriate?
No, new exterior additions are not within the scope of this treatment (Preservation).

1.8 Question 4 of 6

Retaining all three phases of a building development, including its original 1912 configuration, an early 1920's addition, and a 1950's addition—is this scope of work appropriate?
Yes, if Preservation is the treatment selected, all three phases are part of the history of the building and should be retained.

1.9 Question 5 of 6

Installing air-conditioning—is this scope of work appropriate?
The limited and sensitive upgrading of mechanical, electrical and plumbing systems and other code-required work to make properties functional is appropriate within a preservation project. However care must be taken not to obscure, damage, or destroy character defining materials or features in the process of undertaking work to meet code and energy requirements.

1.10 Question 6 of 6

Installing new gypsum board ceilings to replace plaster ceilings that have been failing—is this scope of work appropriate?
No. Deteriorated portions of a historic building may need to be protected through preliminary stabilization measure until additional work can be undertaken. In this case, the stabilization of any loose plaster should occur immediately until the reason for the failure is determined and a repair solution identified and undertaken. In no case should the plaster be allowed to continue to deteriorate. If it is determined that the plaster needs to be replaced the preferred treatment would be to replace the original feature with in-kind plaster.
### 1.11 Rehabilitation

Rehabilitation is “The act or process of making possible a compatible use for a property through repair, alterations, and additions while preserving those portions or features which convey its historical, cultural, or architectural values.”

In Rehabilitation, historic building materials and character defining features are protected and maintained as they are in the Preservation treatment; however, an assumption is made prior to work that existing historic fabric has become damaged or deteriorated over time and as a result, more repair and replacement will be required. Thus, latitude is given in the Rehabilitation treatment to replace extensively deteriorate, damaged, or missing features using either traditional or substitute materials.

The goal of Rehabilitation is to encourage the continued use and repair of a historic building while allowing appropriate alterations to ensure their contemporary use. This includes providing for accessibility.

Only Rehabilitation acknowledges the need to alter or add to a historic property to meet continuing or changing uses while retaining the property's historic character.

### 1.12 Rehabilitation Is Flexible

Rehabilitation is the most flexible of all the treatments and would be the appropriate treatment when considering adaptive reuse projects such as the conversion of former office buildings into apartments, warehouses into offices and retail, or industrial buildings into commercial space.

Here we see the Railway Express Agency building in Sacramento that was adaptably reused as retail and office space.

The rehabilitation treatment allowed for flexibility in the interior rebuilding due to the extremely deteriorated shell condition and collapse of the roof structure. Work included a seismic retrofit, all new services, and reconfiguration of the interior; all while maintaining and rehabilitating the character defining features of the building.

### 1.13 Question 1 of 7

Rehabilitation can encompass the past, present and future.

Retaining the 1905 exterior appearance of a building as well as a significant 1940’s public entrance and elevator lobby—is this scope of work appropriate under the goal of the Rehabilitation Treatment?

Yes, changes to a property that have acquired historic significance in their own right will be retained and preserved when Rehabilitation is the selected treatment.
1.14 Question 2 of 7

Thorough cleaning of a building exterior is always a good thing as part of any project. Is this scope of work appropriate?
Removing the patina of historic materials is never a good thing, and the patina may actually be a protective coating on some metals, such as bronze or copper, as well as a significant historic finish. Any cleaning should use the gentlest and least abrasive means possible.

1.15 Question 3 of 7

Removing deteriorated wood siding and replacing it with new stucco—is this scope of work appropriate?
Repair versus replacement is always emphasized by the Rehabilitation Standards. Only when a feature is too severely deteriorated and beyond repair should replacement be considered, and then, preferably in-kind. This involves the new feature matching the old in design, color, texture, and other visual qualities and, where possible, materials. In this case, the replacement of one cladding with another type of cladding is not an acceptable treatment under Rehabilitation.

1.16 Question 4 of 7

Adding a new stair and elevator tower on a non-visible rear elevation—is this scope of work appropriate?
While new additions to a property are possible to serve the new use, the building’s distinctive materials, features, and spaces must still be preserved. The new design must also be compatible but differentiated from the original building. We will talk more about compatibility in Module 3.
However, exterior additions should be considered only after it is determined that needs can’t be met by altering secondary and/or non-character defining spaces.

1.17 Question 5 of 7

Installing solar panels on a highly visible roof surface—is this scope of work appropriate?
Consider alternatives such as placing solar panels on non-visible roof areas or by placing them on the ground in an inconspicuous location. You may also want to consider buying shares of a solar farm, where such an option is available, which will provide an economic benefit while avoiding any visual impact to a historic property.
1.18 Question 6 of 7

Installing new exposed ducts as part of a new mechanical system—is this scope of work appropriate?

Generally, if original systems and services in the historic building were not visible or if they were not incorporated into the original construction, any new systems and services should be invisible to the extent possible, and in no case adversely impact any historic character defining features, spaces, or materials. An exception to this approach may be an industrial or utilitarian setting where exposed systems may be appropriate if designed to be compatible with the vernacular context in which they are placed.

1.19 Question 7 of 7

The color of paint chosen is not important because rehabilitation allow for flexibility. Is this scope of work appropriate?

Not always true. The material or finish color of a building may be part of the character defining features of the building and a significant part of the building’s exterior appearance. To answer this question you need to assess whether color is an important feature of the building’s history.

1.20 Restoration

Restoration is “The act or process of accurately depicting the form, features, and character of a property as it appeared at a particular period of time by means of the removal of features from other periods in its history and reconstruction of missing features from the restoration period.”

Rather than maintaining and preserving a building as it has evolved over time, the goal of Restoration is to return a building to its appearance during a particular period in time.

Once you have selected the period of restoration you need to develop a work plan for the restoration. What are some of the important aspects of this plan? Begin by identifying those materials and features from the restoration period based on thorough historical research. And then, maintain, protect, and repair those identified features.

The use of the restoration treatment may require removing features from other periods in a building’s history and reconstructing missing features from the restoration period.

For example, as part of the adaptive reuse of this building at Fort Baker in Marin County, a later addition front porch was removed and the original front porch was constructed based on historical documentation. As a result, the new porch restored the front appearance of the building to the property’s period of significance.
1.21 Question 1 of 6

Removing a later addition that is outside the property’s period of significance and restoring a house to its original appearance. Is this scope of work appropriate under the goal of the Restoration Treatment?

Establishing and selecting a restoration period should be your first step in guiding decisions made on the project using the Restoration Treatment. Typically, the period deemed the most significant to the building’s interpretation should be used to guide the work, which may mean removing later additions.

1.22 Question 2 of 6

Adding architectural detail to make a plain building look more “period” or adding features from other buildings of the period to better relate the building to its context—is this scope of work appropriate?

Combining features that never existed together historically can create a false sense of history and should be avoided.

1.23 Question 3 of 6

Replacing a missing brick chimney, closing a non-original window opening, and seismically reinforcing the original foundation to restore a wood frame bungalow to its 1907 period of significance—is this scope of work appropriate?

Yes, based on the period selected it would be appropriate to retain and repair materials from the most significant time in a property’s history, remove features from other periods, and recreate non-surviving features.

1.24 Question 4 of 6

Rebuilding a missing cast stone cornice with a glass fiber reinforced concrete product—is this scope of work appropriate?

The recreation of missing features from the restoration period should be based on documentary and physical evidence, using traditional materials such as the original material or compatible substitute materials such as a glass fiber reinforced concrete product.

1.25 Question 5 of 6

Constructing a porch shown on original construction drawings but never built—is this scope of work appropriate?

No, contemporary alterations and additions or designs that were never executed historically are not appropriate under Restoration.
1.26 Question 6 of 6

Installing exposed fire sprinkler lines and mechanical ducts because they are technically reversible—is this scope of work appropriate?

Although energy efficiency, accessibility and code considerations are often a necessary part of restoration projects, it is usually not part of the overall process of protecting, stabilizing, conserving, or repairing features from the restoration period; rather, such work is assessed for its potential negative impact on the building’s historic appearance. Any new systems and services undertaken should not obscure, damage, or destroy historic features.

1.27 Reconstruction

Reconstruction is “The act or process of depicting, by means of new construction, the form, features, and detailing of a non-surviving site, landscape, building, structure, or object for the purpose of replicating its appearance at a specific period of time and in its historic location.”

The goal is to create a new building as it appeared at a particular, and most significant, time in its history. Or, to recreate something from the past that no longer exists.

It should be noted that while Restoration focuses on restoring or recreating building features, Reconstruction provides the guidance necessary to recreate an entire non-surviving building or structure with new material.

1.28 Reconstruction

In Reconstruction there is far less extant historic material prior to treatment, and in some cases nothing visible.

Sutter’s Fort in Sacramento is a reconstruction of an original fort built in 1839. However by 1851, Gold Rush vandals had destroyed all but the central two-story building.

Between 1891 and 1893 The Native Sons of the Golden West reconstructed the fort and then donated it to the State of California. Sutter’s Fort became part of the State Parks system in 1947. Today the Fort reflects its 1846 appearance and stands as the oldest reconstructed fort in the United States.

Because of the potential for historical error in the absence of sound physical evidence, this treatment can be justified only rarely and, thus, is the least frequently undertaken. Documentation requirements prior to and following the work are very stringent. Measures should be taken to preserve extant historic surface and subsurface materials. Finally, the reconstructed building must be clearly identified as a contemporary recreation.
1.29 Question 1 of 6

Installing new garden paths, planting beds, and perimeter fencing based on archeological documentation—is this scope of work appropriate under the goal of the Reconstruction Treatment?

Yes, the goal of physical research such as archeology is to identify the features of the building and site essential to an accurate recreation, while leaving those archeological resources that are not essential, undisturbed. Any remaining historic materials and features, such as remnants of a foundation or chimney and site features such as a walkway or path, should be retained, when possible. Both historic and new material should be carefully documented to guide future research and treatment.

1.30 Question 2 of 6

Reconstructing a building to reflect two significant and equally important periods of history—is this scope of work appropriate?

No, only one period of significance is generally identified; a building as it evolved is rarely recreated.

1.31 Question 3 of 6

Reconstructing a building based on a historic painting of the property—is this scope of work appropriate?

A painting may contain a certain amount of artistic license and may not accurately represent the building at any time in its history. Only a building whose original design can be documented as having been built should be considered for reconstruction. Justifying a reconstruction requires detailed physical and documentary evidence to minimize or eliminate conjecture and ensure that the reconstruction is as accurate as possible.

1.32 Question 4 of 6

Incorporating new structural and mechanical systems not original to the building as part of its reconstruction—is this scope of work appropriate?

The use of contemporary materials and technology for non-visible features of the building, such as interior structural components or mechanical systems, is acceptable under Reconstruction. However, new systems and services should be concealed to the extent possible and not destroy any extant historic features and materials or obscure reconstructed features. New systems such as the vertical runs of ducts, pipes, and cables should be installed in closets, service rooms and wall cavities or in the least intrusive way possible.
1.33 Question 5 of 6

Reconstructing a building based on historic documentation but locating it on a new site—is this scope of work appropriate?
No, reconstructing a building on a site other than its historic location would not be an accurate reconstruction of the building or property.

1.34 Question 6 of 6

Installing identifiable dates on all new work so that the average visitor is aware of the reconstruction is ok because everything has been recreated--is this scope of work appropriate?
While new construction must be clearly identifiable as a contemporary recreation, it can be done in subtle ways so as to not overpower the sense of place being conveyed. This could be done through an explanatory brochure or exhibit, or the select placement of signs to identify the building as a contemporary recreation.

1.35 Four Treatments Quiz

Follow the instructions on the screen to select your answer. [This exercise asks the learner to match each of the four treatments, Restoration, Rehabilitation, Preservation, and Reconstruction with its definition.]
Emphasizes the retention of materials from the most significant time in a property’s history.
Establishes limited opportunities to re-create a non-surviving site, landscape, building, structure, or object in all new materials.
Focuses on the maintenance and repair of existing historic materials and retention of a property’s form as it has evolved over time.
Acknowledges the need to alter or add to a historic property to meet continuing or changing uses while retaining the property's historic character.

1.36 Thank you

This concludes Module 2 of the three modules contained in this course about the Secretary of the Interior’s Standards for the Treatment of Historic Properties.
For additional information and guidance on a number of historic preservation issues, as well as all of the reference materials cited in this module, click on the “Resources” tab at the top of the screen. This will direct you to an OHP web page with a listing of, and links to a variety of related reference materials.
Module 3

This is the script for Module 3 of OHP’s eLearning course Interpretation and Application of Secretary of the Interior’s Standards for the Treatment of Historic Properties available online at www.ohp.parks.ca.gov/eLearning.

1.1 Interpretation and Application of the Standards for Rehabilitation


Hello, my name is Timothy Brandt. I am a Senior Restoration Architect with the California State Office of Historic Preservation. I will be your guide through this module created for local preservation commissioners and others who want to learn how to interpret and apply the Secretary of the Interior's Standards for the Rehabilitation of Historic Properties.

1.2 Why the Standards for Rehabilitation?

In Module 1 we introduced the Secretary of the Interior’s Standards for the Treatment of Historic Properties as the general principles to govern work on historic resources.

In Module 2 we covered the four treatments and their related standards for: Preservation, Rehabilitation, Restoration, and Reconstruction.

Of those four treatments for historic properties, the Standards for Rehabilitation are the most commonly used for building projects in the United States and are the focus of this module.

Rehabilitation is defined as the act or process of making possible an efficient compatible use for a property through repair, alterations, and additions while preserving those portions or features that convey its historical, cultural, or architectural values.

Change is often necessary for the adaptive reuse or continued use of a building. Remember that of the Four Treatments, only Rehabilitation allows for an efficient contemporary use through alterations and additions - as long as the historic character of the building remains.

To read more on the Rehabilitation Standards and the Illustrated Guidelines showing specific examples with Recommended and Not Recommended actions click on the Resources tab above.
1.3 Standards for Rehabilitation

Now we’ll look at each of the Ten Standards for Rehabilitation. Use them for reviewing and evaluating proposed work on historic properties.

In brief, the Rehabilitation Standards outline the following approach when considering work on historic properties.

STANDARD 1: Select a compatible use.
STANDARD 2: Preserve character defining materials and features.
STANDARD 3: Retain the sequence of historical development.
STANDARD 4: Consider later changes as potentially significant.
STANDARD 5: Protect distinctive construction and craftsmanship.
STANDARD 6: Repair rather than replace.
STANDARD 7: Avoid destructive physical and chemical treatments.
STANDARD 8: Minimize impacts to archeological resources.
STANDARD 9: Make alterations and new additions compatible.
STANDARD 10: Make new additions reversible.

1.4 Standard 1: Compatible Use

So let’s begin with Standard 1.

A property will be used as it was historically or be given a new use that requires minimal change to its distinctive materials, features, spaces, and spatial relationships. The goal of Standard 1 is to select a compatible use for the building.

Whether considering a continued use or a new adaptive reuse, look to the existing building’s size, scale, massing, layout, and spaces and volumes for clues on the compatibility of any new work.

Compatible new uses illustrated here include McClellan Air Force Base Officer’s Housing in Sacramento where single family officer housing was converted to hotel use that required no changes to the exterior and minimal interior changes.

This second example shows the adaptive reuse of a gas station into a neighborhood restaurant that allowed character defining features such as the overall setting and architecture, garage openings, and interior volumes of the office and garage bays to remain as part of the rehabilitation.

1.5 Standard 1: Compatible Use Example

Although some buildings are easier to reuse than others, a compatible use should only minimally change a building’s character defining features, including
its setting, architecture, size, scale, massing, and interior spaces and volumes. Here we see the historic Fire Station at McClellan Air Force Base. Although the building was converted to offices, the reuse respected the character defining features of the building. What are other compatible uses could you identify for this building or similar fire stations in your area?

The continued use of a property as originally intended may be more problematic for larger scale buildings such as these hangars and warehouse buildings also at McClellan. Although these types of utilitarian buildings may allow for more flexibility in their continued use or adaptive reuse, the same principles apply in retaining the character defining features of the building and its setting.

Programmatic needs that require radical changes are not compatible and do not meet the Standards.

1.6 Standard 2: Historic Character

Standard 2 is: The historic character of a property will be retained and preserved. The removal of distinctive materials or alteration of features, spaces, and spatial relationships that characterize a property will be avoided.

The goal of the second standard is to preserve the character defining materials and features of the building.

You can apply Standard 2 to your review of any building, whether it is the Carson Mansion in Eureka or a vernacular building in Calaveras County. To apply this Standard first identify, then retain and preserve those features that contribute to the character of the building.

1.7 2. Historic Character Example

In looking at these two examples of vernacular buildings in the Sacramento Delta, which of them meets the goal of Standard 2?

1.8 2. Historic Character Example

Let’s look at how this building retains its historic character. How many features can you identify that contribute to the historic character of this building?

Did you include?
- Its 2-story height
- A covered front porch
- A projecting parapet at the roofline
- A storefront with double entry doors on the main elevation
- Panelized metal siding
Wood double hung windows

1.9 2. **Historic Character Changes**

These buildings were originally very similar to the building we just reviewed. Can you identify the changes that have resulted in a loss of historic character?

Did you include?
- The removal of porches
- The loss of storefronts and center entries
- The loss of a parapet
- The **incompatible windows**
- New siding that is not in keeping with the character of the original buildings, some of which is still evident on the side elevations

1.10 **Standard 3: Historic Period**

Standard 3 says:

Each property will be recognized as a physical record of its time, place, and use. Changes that create a false sense of historical development, such as adding conjectural features or elements from other historic properties, will not be undertaken.

The goal of Standard 3 is to retain the sequence of historical development.

In this example, a new covered walkway added to create a false western appearance would not be compatible with Standard 3.

This example of Eagles Hall in San Diego shows a 1917 photo of the building as it was originally built. The primary elevation of this classical revival building was composed of three bays separated by stylized pilasters, and capped with a frieze and pediment.

When the building was enlarged in 1936, the original frieze and pediment were removed and three new bays separated by replica pilasters were added.

As part of a 1980’s rehabilitation, the owners put a pediment and frieze back onto the building creating an appearance that never existed. As a result, the project did not meet Standard 3.

In this example, the owners of the Shipsey House looked to the main residence when they constructed a new garage to replace a non-historic garage on the property.

Although new construction, the design, materials and overall scale were based on the original house and respected the character of the property. In addition missing features on the residence were reconstructed based on historic
photographs and documentation. As a result, this project met Standard 3.

**1.11 Standard 4: Acquired Significance**

Standard 4 states:

Changes to a property that have acquired historic significance in their own right will be retained and preserved.

The goal here is to recognize that buildings change over time and later changes can become significant.

Features don’t have to be original to be historic and significant. Most buildings change over time. You should consider whether changes made to the building have achieved their own historical significance.

This headquarters building for the Southern California Gas Company was designed by Parkinson and Parkinson and constructed in 1925. As the company grew it continued to expand through a number of additions. This 1941 Streamline Moderne addition was designed by Robert V. Derrah, the 1952 Utilitarian Postwar Modern addition by Lunden, Hayward & O’Connor, and the 1959 Corporate International addition by Albert C. Martin and Associates.

Each of the buildings was designed by a noted architect and also represented the progressive growth of the company. As a result, all of the subsequent additions contribute to the significance of the complex as a whole.

**1.12 Acquired Significance Example**

As you saw from the last example, alterations and additions constructed within a building’s period of significance may be significant and should be retained.

Here we see an 1840’s log cabin that was covered with wood siding shortly after it was built.

Would you consider the wood siding to have achieved historic significance?

Remember that Standard 4 says a feature that has acquired significance over time and is important in defining the historic character and development of the building and its setting should not be removed.

As part of rehabilitating the building the new owners removed the siding to expose the original logs.

Would you consider this removal compatible with Standard 4?

Remember that the wood siding was in place longer than the period in which the logs were exposed. The National Park Service in review of the project determined that the siding had acquired significance in its own right and should have remained in place because that is what the building looked like for most of its life.
1.13 Standard 5: Preserve Distinctive Features

Standard 5 states:

Distinctive materials, features, finishes, and construction techniques or examples of craftsmanship that characterize a property will be preserved.

The goal of this standard is to retain and preserve distinctive character defining features.

Distinctive features and craftsmanship can be very obvious such as this stair at the Workman Temple in the City of Industry or this ceiling detail at one of the Hearst Castle guest cottages, or be more subtle or utilitarian in appearance as shown in this remnant of Sacramento’s underground sidewalks.

1.14 Preserve Distinctive Features Examples

Character defining patterns and features in cultural landscapes should also be identified and preserved. Distinctive features of landscapes can include fencing, walls, walkways, driveways, hedges, foundation planting, paving materials, and signage.

The goal of Standard 6 is to repair rather than replace historic character defining features.

Here are some examples of landscapes with distinctive features:

- A tree lined residential streetscape in East Sacramento,
- The industrial hard-scape at Mare Island in Vallejo,
- And, the designed landscaped setting of Chase Knolls Garden Apartments in Sherman Oaks

1.15 Standard 6: Repair/Replace

Standard 6 states: Deteriorated historic features will be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature will match the old in design, color, texture, and, where possible, materials. Replacement of missing features will be substantiated by documentary and physical evidence.

The goal of Standard 6 is to repair rather than replace historic character defining features.

Think of a building or structure as the sum of its parts that all contribute to the significance of the property as a whole. Each lost part begins to erode the integrity of the building. And if you replace too many of those parts you no longer have a historic building but a replica.

Using Standard 6 your first priority should be to repair important features. Only when a feature is beyond repair should you consider replacement and then it
should be done accurately.

1.16 Repair/Replace Example

Can you identify the repair in this photo?

In this example a new handrail piece was spliced into the rest of the existing railing. This is a good example of limiting replacement to only one part of a larger assembly. Should you worry about the new part looking out of place with the rest of the fence? Not really, because in time this new part will weather and match the finish or patina of the rest of the fence.

Can you spot the inappropriate replacement in this house?

Notice that the inappropriate replacement of a double-hung multiple-light window with a single-light casement window substantially alters the character of this building.

Now step back and look at the building as a whole. Notice the wide variety of window types that have occurred over the years. This cumulative effect is a major impact that alters the character of the original building.

1.17 Repair/Replace Example

Replacement of a specific feature or material is sometimes necessary due to defects in the original construction methods, detail, or the material itself.

At the Wawona Hotel in Yosemite the original non-structural porch skirting was partially replaced with a board formed concrete wall as part of the overall structural retrofit of the building. Although constructed in a new material, the concrete was board formed to replicate the original wood skirting. While physically a new material, the appearance and painted finish of the concrete allow it to blend in with the original wood and at the same time correct a structural deficiency.

1.18 Standard 7: Cleaning

Standard 7 says: Chemical or physical treatments, if appropriate, will be undertaken using the gentlest means possible. Treatments that cause damage to historic materials will not be used.

The goal of Standard 7 is avoid using destructive physical and chemical treatments.

In this example, sandblasting damaged the exterior hard surface of the brick on the left resulting in a rough, sponge like texture. The brick to the right of the photo was not damaged because it was hidden behind a sign.

Regardless of the cleaning method you choose, always try a test of the method
in a discrete place on the building, and use the lowest pressure, or pound force per square inch, for anything involving a spray.

**1.19 Standard 8: Archeology**

Following Standard 8: Archeological resources will be protected and preserved in place. If such resources must be disturbed, mitigation measures will be undertaken.

The goal of Standard 8 is to minimize impact to archeological resources.

New construction or any project related site work should not disturb any significant archeological resources. If such work can’t be avoided, it should be minimized to the extent possible. Any archeological discoveries should be documented following an archeological research and treatment plan.

**1.20 Standard 9: Compatibility of New Work**

To comply with Standard 9: New additions, exterior alterations, or related new construction will not destroy historic materials, features, and spatial relationships that characterize the property. The new work will be differentiated from the old and will be compatible with the historic materials, features, size, scale and proportion, and massing to protect the integrity of the property and its environment.

The goal of Standard 9 is to make alterations and new additions compatible with the historic character of the building and its setting.

Additions with their inherent challenges are a subject you will probably face as smart growth, transit oriented development and land use planning continue to encourage densification and increase pressure on our existing historic building stock.

Ideally, new work is incorporated within the existing envelope of the building. However when this is not possible due to space limitation and/or historic fabric, the work should be placed in an addition that is not readily visible.

The addition should be differentiated from the historic building so that the new work is compatible with, and does not detract from, the historic building, and cannot be construed as historic.

**1.21 9: Compatibility of New Work**

Here we see the Mono County Courthouse in Bridgeport where an elevator and additional stair were needed to provide accessibility and meet code requirements.

What is the first thing you should ask in the review of this proposed work?

In this case the work could not be accommodated within the building therefore an
addition was an acceptable alteration.
Where would you propose to locate the addition? And how would you design it?

1.22 Question 1 of 6

Here’s how they did it.
The new elevator tower and open stair were added to the rear of the building because the front and two side elevations were highly visible from the courthouse grounds and surrounding neighborhood. The new addition met the need for accessibility and also linked the main building to a rear annex.

Here’s a view of the front of the building. A series of questions will follow to help you analyze whether this work meets Standard 9.

Is the addition placed on an inconspicuous elevation of the building?
Remember that any new addition should not change the character of the historic building or damage or destroy significant historic materials and features.

1.24 Standard 9 - Question 3

Is the addition placed on an inconspicuous elevation of the building?
A new addition should cause minimal change to a primary elevation or any views of the building from the public right of way.

1.24 Standard 9 - Question 4

Is the addition differentiated but compatible?
The new work should not replicate the original building. Nor should the addition be so different that it becomes the primary focus. The differences should be subtle and clear.

1.25 Standard 9 - Question 5

Is the new addition subordinate to the historic building?
The addition should be compatible in size, scale, proportion, massing, and design to the historic building

1.26 Standard 9 - Question 6

Do you think this addition met Standard 9 to protect the integrity of the property and its environment?
Office of Historic Preservation determined that the new addition did meet
Standard 9.

**1.27 Oregon Building Question 1**

Let’s use the same process to determine whether the following work also meets Standard 9. Here the owners wanted to increase the size of a historic building in Portland, Oregon. They chose to add a fourth floor.

The National Park Service provides specific guidance for rooftop additions in their Preservation Brief 14. Here are a series of questions based on that brief to help you analyze whether this addition met Standard 9.

Is the addition minimally visible?

An addition should not change the overall size, scale, and massing of the original building or become a dominant new feature.

**1.28 Oregon Building Question 2**

Is the addition set back from the primary elevation of the building?

Rooftop additions should be set back at least one bay from the primary elevation of a building and not be readily visible. Construction of a rooftop addition flush with an existing building facade would not be compatible.

**1.29 Oregon Building Question 3**

Is the addition limited to one story in height?

Rooftop additions should be limited to one story to minimize its visibility and impact on the proportion and profile of the historic building.

**1.30 Oregon Building Question 4**

Is the addition compatible but differentiated?

Rooftop additions can reference but should not mimic or replicate the historic building.

**1.31 Oregon Building Question 5**

In general, rooftop additions are not appropriate for low- to mid-rise buildings and are often not appropriate for taller buildings if the addition is readily visible. Rooftop additions are more likely to be compatible on a building that is adjacent to similarly sized or taller buildings.

Do you think this rooftop addition met Standard 9?

As part of a Federal Preservation Tax Credit review the NPS determined that the
project did not meet Standard 9. Although the addition was limited to one story it was designed flush with the original building elevation which resulted in a major impact on the proportion and roofline profile of the historic building. Absent the date placed on the new addition, the difference between the historic building and the addition is not readily apparent.

Since both Standards 9 and 10 deal with new additions, alterations, or any related new construction, they are usually considered together when reviewing work on historic properties. So, let’s move on to Standard 10.

### 1.32 Standard 10: Reversibility of New Additions

Standard 10 requires that: New additions and adjacent or related new construction will be undertaken in such a manner that, if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.

The goal of Standard 10 is to make new additions reversible. Or in other words, if the addition were removed could the original building still function on its own.

### 1.33 Standard 10 - Question 1

Here we see the Hall of Justice in Sacramento. Originally constructed in 1917, the building underwent a rehabilitation in 2000 which included a new rear addition. Project work included a visual separation between the new and original construction and a few window-to-door conversions to allow interior access. The rear exterior of the original building remained visible within the new construction.

Is the addition compatible with Standards 9 and 10? Let’s walk through some design issues to see if you think the project successfully met these standards.

### 1.34 Standard 10 - Question 2

Is the addition appropriately placed?

Remember that a new addition should not change the character of the historic building or damage or destroy significant historic materials and features.

### 1.35 Standard 10 - Question 3

Is the new addition clearly discernible from the original building?

The use of a hyphen to separate an addition from the original building is a common way to provide a visual separation.
**1.36 Standard 10 - Question 4**

Is the addition compatible but differentiated from the original building?

- Should be compatible to original building
- Should reference but not copy features

Should retain character defining features and materials

**1.37 Standard 10 - Question 5**

Is the addition reversible and therefore consistent with Standard 10?

New additions could be considered reversible, if when removed, the original building could still function on its own.

**1.38 Standard 10 - Question 6**

Overall would you say that this project is compatible with both Standards 9 and 10?

The Hall of Justice project was approved by the NPS as part of a Federal Preservation Tax Credit project review. The project was found to meet the Standards, including Standards 9 and 10 through:

- The use of a clearly modern design, large expanses of glass on the street elevation bay, and a hyphen to provide a visual separation between the old and the new;
- A new rear facade based on the original building elevation but interpreted in a new way;
- The continuation of strong horizontal lines from the original architecture to provide linear continuity;
- The use of granite, as one of the original building materials, as part of the new addition cladding;
- The use of punched and inset openings on the rear elevation to match the original window conditions;
- And most importantly, retaining and preserving the features and materials of the original construction.

To learn more about additions to historic buildings you may want to read NPS’s Preservation Brief #14 on New Exterior Additions to Historic Buildings: Preservation Concerns. To access this brief, click on the Resources tab above.
1.39 Thank You

This concludes Module 3 of the three modules contained in this course about the Secretary of the Interior’s Standards for the Treatment of Historic Properties course.

For additional information and guidance on a number of historic preservation issues, as well as all of the reference materials cited in this module, click on the Resources tab at the top of the screen. This will direct you to an OHP web page with a listing of, and links to a variety of related reference materials.