

UNDERSTANDING INTRINSIC QUALITIES

- **What is an “Intrinsic Quality”?**

The National Scenic Byways Program defines intrinsic quality as “features that are considered representative, unique, irreplaceable, or distinctly characteristic of an area.”

Intrinsic qualities arise from a particular combination of resources along a byway that together define its character, interest and appeal. These resources are the special views, places, buildings, sites, and other features that residents enjoy and that provide the byway’s drawing power and interest for travelers. A resource can be natural, such as a gorge, mountain or lake; or it may be the result of human activity, such as an historic building, a battle site, or a well-designed parkway.

- **Federal Register - Interim Policy Definitions:**

In response to the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) mandate to establish a National Scenic Byways Program, the Interim Policy (May 18, 1995, Federal Register Volume 60, Number 96) sets forth the criteria for the designation of roads as National Scenic Byways or All-American Roads based upon their archaeological, cultural, historic, natural, recreational, and/or scenic intrinsic qualities.

Following are the official definitions as set forth in the Interim Policy, with additional inventory and designation considerations for each Intrinsic Quality:

- A. **Archaeological Quality** involves those characteristics of the scenic byways corridor that are physical evidence of historic or prehistoric human life or activity that are visible and capable of being inventoried and interpreted. The scenic byway corridor’s archaeological interest, as identified through ruins, artifacts, structural remains, and other physical evidence have scientific significance that educate the viewer and stir an appreciation for the past. (FHWA Interim Policy, May 18, 1995)

Inventory and Designation Considerations for Archaeological Quality

Archaeology is the study of the physical evidence of the human past. This evidence can include ruins, artifacts, structural remains, and other physical evidence of human activity. Note that a precondition for archaeological quality is the presence of physical remains. The mere fact a road follows Native American or early European travel routes, for example, would not justify designation, whereas intact campsite areas along the route could provide the necessary physical evidence.

For a road to have archaeological quality that is significant enough to merit National Scenic Byway designation, the archaeological resources along the corridor must be both important and accessible:

- The resources must have scientific significance – resources of a type that cannot be commonly found throughout a region or in other places across the country.
- The physical evidence must be visible and capable of being inventoried and interpreted – visitors must be able to experience and learn about the past through direct contact with the past.

What this means is that if travelers are not able to see the evidence, the byway cannot be designated for its archaeological quality, even if it has great scientific significance.

If the site is visible and it is extremely fragile and sensitive to disturbance, as is often the case, careful management is necessary to prevent damage to or loss of these resources. Consequently, archaeological quality should not be the focus of a byway's story unless there are established federal, state, nonprofit or private organizations with programs in place to manage the resources and to provide the facilities and sites that can handle visitors.

Archaeology will sometimes be an important part – or the central part – of the physical evidence that supports a story based on historic or cultural intrinsic qualities. Native American, colonial settlement, industrial revolution, early tourism, and agrarian themes will be common byway stories. There will often be overlaps and connections between the stories and sites that are illustrative of different intrinsic qualities.

This intrinsic quality will allow communities to creatively promote and responsibly protect their archaeological resources. In all cases, be sure to recognize the fragility of these resources. You may even find it more appropriate to not promote a site given its precarious nature.

- B. Cultural Quality** is evidence and expressions of the customs or traditions of a distinct group of people. Cultural features including, but not limited to, crafts, music, dance, rituals, festivals, speech, food, special events, vernacular architecture, etc., are currently practiced. The cultural qualities of the corridor could highlight one or more significant communities and/or ethnic traditions. (FHWA Interim Policy, May 18, 1995)

Inventory and Designation Considerations for Cultural Quality

A significant feature of the National Scenic Byways Program is that it recognizes the importance of cultural activities along a route as well as the natural and built landscapes through which the road travels. Cultural resources along a byway can include distinctive communities such as ethnic groups or concentrations of craftspeople and events, traditions, food, or music. Because cultural qualities are not necessarily expressed in the landscape, these attributes may present special challenges in byway planning.

Culture encompasses all aspects of a community's life, and it may be difficult to decide what to include and what not to include when collecting information about a community. Look especially for these aspects:

- Geography – settlement patterns; climatic influences on building styles; place names, stories, and legends
- Economy – occupations, products, training, yearly cycles, land use patterns, material culture
- Community Life – civic and religious buildings, institutions, customs, and rituals, especially aspects of immigrant culture
- Domestic Life – households, housing styles, food, gender and age roles, family traditions

- Artistic Genres – folklore, music, customs, legends, dance, drama, games, music, art, architecture, crafts, dress, and costumes

In addition, identify activities or features that illustrate the area's historic or contemporary culture or suggest how it may develop in the future. A special festival, a distinctive manufacturer of goods, and an unusual farm or village might all be significant cultural resources. Stories or physical features that can be found anywhere or those that express common aspects of American culture should not be included in the inventory.

Cultural qualities often overlap with other intrinsic qualities. Cultural interpretation of the present-day continuation of historic rituals might enhance a byway's historic or archaeological quality. The relationship of people to the natural environment or the ways they recreate both may be aspects of cultural quality. Finally, architecture and land management practices are expressions of culture, and they define some scenic landscapes.

- C. **Historic Quality** encompasses legacies of the past that are distinctly associated with physical elements of the landscape, whether natural or manmade, that are of such historic significance that they educate the viewer and stir an appreciation for the past. The historic elements reflect the actions of people and may include buildings, settlement patterns, and other examples of human activity. Historic features can be inventoried, mapped, and interpreted. They possess integrity of location, design, setting, material, workmanship, feeling, and association. (FHWA Interim Policy, May 18, 1995)

Inventory and Designation Considerations for Historic Quality

Many highway corridors are rich in history and their stories tie closely to the history of the nation in general. Several designated roads in the National Scenic Byways Program have strong historic themes:

- The Natchez Trace Parkway in Mississippi, Tennessee, and Alabama follows a trail used by Native Americans, post riders, soldiers, and fortune seekers linking the early United States to the Mississippi Territory.
- Connecticut's Merritt Parkway not only provides an outstanding example of a carefully designed parkway, but reflects the nation's concern with public improvement projects during the Great Depression.
- The Selma to Montgomery March Byway in Alabama follows the route of one of the key events during the Civil Rights movement of the 1960s.

The historical stories told by these byways range from specific events to broad movements and illustrate the range of possibilities for byway themes. It is important to note that each of these examples contains within its local or regional context a larger story that relates to the evolution of the American nation and society.

Historic quality can derive from the association of a byway with a specific set of events, such as the progression of battles along trails or roadways still in use today. Communities can also coordinate their byway using a consistent or an evolving historical story that links together diverse events and

time periods. For instance, a byway might interpret the historical development of farming, a specific industry, or a particular social or political movement. Some roads are historically significant because of their place within the development of the national transportation network – for example, the Lincoln Highway, the National Road, the Dixie Highway, US 1 and US 66.

The historic quality of a byway depends on the connection that the road makes among the individual resources along the corridor. The byway must contain enough features to create a story with a certain level of continuity and coherence. Although an individual structure or place may have great historical significance, a roadway cannot achieve National Scenic Byway designation based only on the existence of one site. Rather, the historic story should provide a link among resources at various points along the byway and a means of interpreting these resources to the visitor.

In many cases, the historic quality of a byway will be closely linked to its scenic, cultural, or natural qualities. For example, traditional architecture and settlement patterns often reflect historical development. They are also, however, expressions of culture and lifestyle as well as being key attractions for travelers. A less obvious example of multiple values is a scenic road through narrow valleys and mountain gaps; travelers appreciate the beauty of these byways but may not grasp as readily their historic importance as transportation routes and vital links among small communities.

- D. **Natural Quality** applies to those features in the visual environment that are in a relatively undisturbed state. These features predate the arrival of human populations and may include geological formations, fossils, landform, water bodies, vegetation, and wildlife. There may be evidence of human activity, but the natural features reveal minimal disturbances. (FHWA Interim Policy, May 18, 1995)

Inventory and Designation Considerations for Natural Quality

The distinction between natural quality and scenic quality, as defined for the National Scenic Byways Program, may seem unclear. Many scenic byways derive their scenic quality from the views that they provide of natural features such as forests, mountain ranges, or water bodies. At the same time, the definition of natural quality encompasses aspects of the environment that are both visible and relatively undisturbed.

When should a roadway be considered for its natural quality as well as its scenic quality? The National Scenic Byways Program uses three criteria to make this determination: significance of the resources along the byway, visibility of the resources from the byway, and integrity of the resources in their original state – how they appeared before the arrival of European populations.

1. Significance of the Natural Resources:

The first priority is to focus on the significance of the natural resources themselves. A road may have great scenic quality based on its natural environment, but this outstanding beauty may simply be how that road relates to its environment more than there being any unusual characteristics of the resources within its corridor. To meet the criteria for natural quality, the byway corridor must contain natural features that are representative, unique, irreplaceable, or distinctly characteristic of the area.

2. Visibility of Resources from the Byway

The resources that contribute to the byway's natural quality must be visible from the roadway, as discussed in Archaeological Quality. The fact that a byway might provide access to natural features that are unusual or distinctive would not be relevant to the natural quality determination if travelers could not see these features from the byway. The National Scenic Byways Program places great emphasis on the visual experience of traveling along a byway.

3. Integrity of the Resources in Their Natural State

The natural features that are visible from the byway should be relatively undisturbed by human activity. Many byway corridors will include areas that exhibit great natural beauty but which are managed or used in some way – for example, rangeland or managed forests. The degree to which these landscapes may have been altered from their state before the arrival of human populations is an important consideration.

Some byways pass through areas that have substantial evidence of human activity but also contain natural resources of outstanding significance:

- California's Pacific Coast Highway provides visual access to the cliffs of the Monterey coastline
- The Trail Ridge Road through Rocky Mountain National Park carries the traveler across the Continental Divide

The corridors of these two roadways include areas with significant human alteration, but the traveler's primary impression is of coming into contact with great natural beauty and grandeur.

Many byways with great natural beauty will not meet the Federal definition of natural quality for the reasons outlined above. They may still meet other intrinsic quality categories that encompass the interaction of people with the environment, such as scenic, cultural, or recreational.

- E. **Recreational Quality** involves outdoor recreational activities directly associated with and dependent upon the natural and cultural elements of the corridor's landscape. The recreational activities provide opportunities for active and passive recreational experiences. They include, but are not limited to, downhill skiing, rafting, boating, fishing, and hiking. Driving the road itself may qualify as a pleasurable recreational experience. The recreational activities may be seasonal, but the quality and importance of the recreational activities as seasonal operations must be well recognized. (FHWA Interim Policy, May 18, 1995)

Inventory and Designation Considerations for Recreational Quality

The National Scenic Byways Program defines recreational quality broadly, encompassing all sorts of outdoor recreation activities that are dependent on natural and cultural elements of the landscape. In addition to active outdoor recreation pursuits, recreation along a byway can include passive activities such as driving for pleasure, wildlife viewing, or quiet enjoyment of the corridor's natural beauty. Because of the breadth of activities and resources that it covers, recreational quality may be the most inclusive of the intrinsic qualities defined for the National Scenic Byways Program.

Many byways offer an abundance of recreational opportunities. However, not all recreational resources will support the designation of a byway for recreational quality. As is the case for the other intrinsic qualities, the determination of recreational quality will depend on three factors: the significance of the resources, their visibility from the byway, and the relationships among the resources and between the resources and the road.

1. **Significance of the Resources**

The individual recreational resources along the byway should themselves be significant. A test of significance would be the degree to which the individual resources draw visitors from outside the immediate area. Thus, national parks or world-class ski resorts would support byway designation; but local hiking trails, ski areas, beaches, or golf courses would not.

2. **Visibility from the Byway**

The byway should provide visual access to the significant recreational resources along the corridor. A ski area that is accessed from a road but is not visible from the road would be less important for byway designation than a whitewater river that runs along the road or a major trail that crosses the road.

3. **Relationships of the Resources and the Road**

Finally, the recreational resources should bear some relation to each other and to the road. One can think of this relationship in terms of three elements: complexity, continuity, and coherence:

- ***Complexity*** means that there are a variety of recreational opportunities along the roadway, providing activities throughout the year and for a wide range of ages and abilities. Seasonal activities are eligible, however, the quality and the importance of these activities must be well recognized. Designation of a byway for recreational quality is not intended to be merely an opportunity for intensively developed private recreation areas to receive free marketing. There must be qualities to the area that are unique or special within the corridor's region and that offer a distinctive travel experience for the user.
- ***Continuity*** means that the recreational resources exist in many places along the byway, rather than being concentrated in only one or a few locations. There must be more than one recreational area for determination as having recreational quality.
- ***Coherence*** means that the recreational resources are related to each other and to the byway in such a way that they support an overall theme or story for the byway. For example, a mountainous area with downhill and cross-country ski areas, back country trails, whitewater kayaking, hot-air ballooning, and dude ranches could present a coherent theme based on geology, climate, and rural culture. In contrast, recreational facilities that are not based the special natural and cultural features of the byway corridor would not support the byway's recreational quality.

Recreational quality will frequently overlap with the other intrinsic qualities. For example, outdoor recreation will typically occur in areas of great natural and scenic beauty. Some recreation areas may have historic stories, others may be expressions of culture. Perhaps more than the other

categories, the integration of one or more of the other resource qualities will be important to achieve designation of a byway for recreational quality.

- F. **Scenic Quality** is the heightened visual experience derived from the view of natural and manmade elements of the visual environment of the scenic byway corridor. The characteristics of the landscape are strikingly distinct and offer a pleasing and most memorable visual experience. All elements of the landscape—landform, water, vegetation, and manmade development—contribute to the quality of the corridor’s visual environment. Everything present is in harmony and shares in the intrinsic qualities. (FHWA Interim Policy, May 18, 1995)

Inventory and Designation Considerations for Scenic Quality

This intrinsic quality is the most difficult to inventory as it is the most subjective. What is beautiful? When is one view or scenic drive more beautiful than another?

As is the case for the other intrinsic qualities, scenic quality is determined by how the existence of resources along the byway contribute to the overall quality. The resources are scenic features – primarily views and vistas – or elements such as the design of the roadway. The scenic quality of a byway is based on the existence of significant scenic views from the road and the absence of features that detract from the overall image of the road.

The byway’s features must also be considered representative, unique, irreplaceable, or distinctly characteristic of an area. South Dakota’s Peter Norbeck Scenic Byway, with its views of the Black Hills and Mount Rushmore, is one example of a byway offering scenery that is unusual and even unique. On the other hand, a byway might represent an exceptionally high quality example of a common regional landscape such as Connecticut’s State Route 169. It travels through rustic farmlands, forests, farmsteads, open spaces, and historic structures that characterize rural New England. Both types of roads exhibit scenic quality because the individual scenic elements and their overall composition are significant.

Regardless of the specific type of views, byways should evaluate the presence of three important characteristics for this intrinsic quality:

1. Continuity of Scenic Features:

Scenic features and views should be frequent enough to give a sense of continuity to the drive along the byway. Conversely, a byway with a few dramatic views interrupted by commonplace landscapes or non-descript urban development is unlikely to have significant scenic quality.

2. Relationships between Scenic Features and the Landscape:

Scenic features will tend to relate to each other, which will usually create a coherent image of the byway. The way in which the roadway relates to its environment is also important to the sense of coherence. For example, the scenic qualities of the Natchez Trace Parkway – a mountainous route – and the Pacific Coast Highway – a coastal road – arise in part from their alignments, which closely follow the natural topography of their distinctive landscapes.

3. Variety of Scenic Views:

A variety of views enhances the scenic quality of a byway. For example, the changing perspectives of mountain scenery from a road winding through the valleys and over passes is more interesting than a single view seen continuously from a road traveling in a straight line. Variety can also be a function of seasonal changes: some landscapes vary dramatically at different times of the year, which often enhances their attraction for travelers.

SKILLS BUILDER: SCENIC EVALUATION CONCEPTS AND METHODS

Scenic Evaluation Concepts

Because scenic quality is so subjective, it is helpful to base findings on commonly used scenic evaluation concepts. Some of these terms include the following:

Intactness	Intactness refers to the degree to which the landscape is untouched in its original form, whether this be natural or historic. For example, intact natural landscapes could include unspoiled wilderness areas; intact historic landscapes could include well preserved historic districts or sites.
Variety	Variety refers to the amount and diversity of differing visual features in the landscape. Normally, the higher the level of variety in a scene, the greater the level of interest.
Color	Color can also provide more interest to a scene. The quality and intensity of color in the landscape as seen in rock formations, soil, water, sky, vegetation, and man-made features should all be considered.
Contrast	Contrast refers to the amount of difference in shading, color, texture, or form of landscape features. For instance, the stark contrast of an open face of granite on a mountainside surrounded by green vegetation provides more interest and appeal than a mountainside completely covered with trees.
Scale	Scale refers to the way in which the height, length, width, and bulk of buildings or other man-made features relate to others and to the natural landscape. A tall, thin building might seem out of scale on a flat beach front or on open rangeland. A large, bulky building would be out of scale with small summer cottages.
Order	Order is lost when elements do not appear to relate to one another or when one element is clearly out of the natural order. For example, when a white concrete building is placed in the middle of a row of brick townhouses, the order of the streetscape is lost.
Harmony	Harmony expresses the degree to which the individual features work together to create a pleasing whole. To the degree that each of the above visual concepts is applicable in a scene, harmony is achieved if they balance and complement one another.

Scenic Evaluation Methods

Following are overviews of two types of scenic evaluation methods, which you can adapt as needed:

- **Attribute scoring systems** look at the attributes and features that make up a view or roadway segment and assign each element either a qualitative score or a qualitative ranking. For example, a quantitative system might give a particular roadway segment a score of 8 for integrity, 6 for color, and so on. Other systems rely on qualitative assessments, such as “distinctive,” “noteworthy,” and “commonplace.” Still other systems simply call for recording whether or not a particular feature, such as a stone wall, occurs within a given segment of roadway. Most of these attribute scoring systems also use some type of weighting system to arrive at a final determination of scenic quality.
- **Visual preference systems** do not attempt to analyze why a view is scenic, but rather to rank many views based on the responses by representatives of a community or user group. Typically, people are shown a series of photographs of different views and score the views based on their own preference. Visual preference surveys are sometimes used to underpin an attribute-based scenic evaluation method.