

# **WSDOT Guidelines for Identifying and Evaluating the Historic Significance of Washington State Highways**

WSDOT recognizes the historical significance of roads and highways in Washington State. The evaluation methods described in this guidance document focus on the tangible aspects or engineered features of a highway, including the road prism, lane width, and sight distance, along with other design elements that reflect the historic character of a roadway. This methodology was developed and tested as part of the 2015 WSDOT Historic Highways Study. The evaluation methods conform to the National Register of Historic Places criterion, but the intent of the study was to identify a new approach in the assessment of Washington's historic highways based on tangible aspects of their historic character, and not the subjective qualities (i.e. visual aspects, feeling, etc.) emphasized in prior road studies. In accordance with WSDOT policy, a historic highway segment may vary in length but must possess, at minimum, 5-miles of continuous or nearly continuous integrity to be considered as a historic resource.

## **NRHP Evaluation Methodology**

While many transportation resources helped to advance regional and state level settlement, industry, and commerce, National Register of Historic Places (NRHP) criteria for evaluation require the consideration of integrity in the assessment of all historic properties. NRHP eligibility for historic highways in Washington depends heavily on a highway's integrity, regardless of its relative significance in the development of the state's transportation system. Although historic-era highways in Washington may be eligible under multiple criteria, a roadway must possess a majority of the seven aspects of integrity in order to convey the roadway's historic significance. Combinations of the following aspects of highway integrity are required for NRHP eligibility:

### **Historic Character**

For a historic highway to be NRHP-eligible, it should retain a preponderance of its historic character. Lengths of eligible highway segments vary, depending upon retention of aspects of integrity addressed below, and how those aspects evoke the highway's historic character. Boundaries of eligible segments are determined by the more or less continuous retention of that historic character. Alignments may be sinuous or straight, depending on topography and construction difficulty. Features such as road surfaces, guardrails and other barriers are likely to have changed over time, and those changes are not considered to be loss of character-defining features. Retaining walls and decorative masonry features within the right-of-way can be contributing elements to a highway's significance, but loss of such features is not disqualifying for a highway's NRHP eligibility. Setting can be a contributing element, but only if the highway itself retains

some or all of the aspects of integrity outlined below. Potential eligibility is enhanced (but not determined) by the presence of historic (i.e., NRHP-listed or eligible) properties adjacent to historic roadways with integrity, provided the settings in which those historic properties occur have not been overwhelmed by non-contributing intrusions. The potential NRHP eligibility of highway segments with good integrity is enhanced by the presence of NRHP-listed and eligible bridges within the segment. The presence of modern or historic-era bridges that have lost integrity do not eliminate the potential NRHP eligibility of a highway segment unless such structures overwhelm the highway segment's historic character.

### **Narrow Lanes, Shoulders and Ditches**

Early highways in Washington State were usually narrow, two-lane roadways between 20 and 26 feet wide. Road lane widths varied among different state highways, and at times, segments within a single route. Nevertheless, lanes tend to measure between 9-12 feet. Shoulder widths vary between non-existent and 2 feet. Drainage ditches adjacent to shoulders or highway fog lines vary in width and depth, the older tending to be more narrow and shallow, and can be on one or both sides of a roadway.

### **Road Prism and Profile**

The road prism is the earthen foundation that supports the pavement and any substrate. Road profile is the road's cross-section in relation to the surrounding landscape. In historic highways, both features are clearly under-engineered in comparison to modern highways. Elevated, banked turns are elements of modern highways, but not usually found on historic highways. Often a road's prism varies, with a base of 22-30 feet wide and a surface of 20-26 feet wide.

### **Sight Distance**

Sight distance is the length of roadway visible to the driver. Impediments to early highway construction, such as topographical features that could not be sufficiently removed or graded, affected designs that resulted in winding alignments and/or undulating road surfaces limiting drivers' sight distance. Performance and speed capabilities of early twentieth century automobiles reduced the need for long, unimpeded sight distances required for modern, faster vehicles.

### **Clear Zones**

Modern highways include clear zones; historic highways have little or no clear zones adjacent to the roadway. A clear zone is defined as a relatively flat area free from obstructions bordering the roadway that allows drivers to stop safely or regain control of a vehicle that has left the roadway. Clear zones extend beyond the shoulder and toe

slope of the roadway, usually requiring removal of trees, rocks and other obstacles to driver safety within the right-of-way. The clear zone is often dictated by traffic volume, vehicular speeds, topography, and rights-of-way widths. Modern wide rights-of-way reflect technological advancements in vehicles and construction capabilities, as well as safety requirements and environmental enhancements. Narrow rights-of-way were more common in historic times, limiting areas that could be cleared if safety off the roadway had been a concern. Based on the presence of natural features immediately adjacent to historic-era highways, it does not appear to have been a concern warranting public expense.

### **Topography and Alignment**

Early twentieth century highway design was constrained by contemporary construction methods and technology. As a result, highways with historic integrity often include features in their alignments that are largely determined by local topography. Cliff faces, escarpments, and waterfronts often determine the curves and twists of a road alignment. Additionally, landscape features such as rock outcroppings and large boulders were typically impediments to roadway construction, causing the alignment to adjust to these obstructions prior to modern construction technology. Topography and alignment often determine clear zones and sight distances, as well as lane and shoulder widths.

### **Speed Limits**

Generally, historic highways are posted with speed limits less than those on modern highways. Speeds on sharp curves are reduced to 25 mph or less on historic highways. Speeds often vary frequently within relative short segments on those roadways, reflecting their designs accommodating some or all of the aspects noted above.

### **Additional Considerations**

Population growth has fostered the development of larger and safer roadways, resulting in significant modifications to facilitate increased traffic volumes on interstates, and many cross-state and regional highways. The vast majority of historic highways (26) surveyed and evaluated as part of the 2015 WSDOT study were found to be substantially modified to the point of possessing little distinguishing historical character.

Many routes pre-date the official state highway system. Some were established as early pedestrian paths, wagon trails, and county roads, and later improved in the early twentieth century to become part of the state road system. Thus, the majority of eligible routes are likely to be former secondary state highways or branch routes that reflect engineering and road design dating to the early 1900s. Results of the 2015 WSDOT study indicate that highways with the highest integrity were often those located in remote and rural areas near small population centers

in Washington State with minimal transportation volume. Moreover, unchanged segments were often sited near topographic or landscape features, such as shorelines and cliffs, which constrain the ability to modify the principal components of the highway, primarily road prism configuration.

### **Sample Historic Highway Evaluations**

Visit <http://www.wsdot.wa.gov/environment/protecting/history-archaeology-culture#Highways> for detailed summaries of NRHP eligible historic highway segments.

#### **SR 112**

A 12.5-mile segment of State Route 112, formerly known as Secondary State Highway 9A and Neah Bay Road, was found to retain high levels of integrity of location, setting and design. It is eligible for inclusion in the National Register of Historic Places under Criterion C, as it is representative of early 20th century highway engineering, design, and construction methods in Washington State. Located on the Olympic Peninsula, the segment begins at the border of the Makah Indian Reservation and ends at the Hoko-Ozette Road junction. In the few places where the roadway varies from its original dimension, those sections are considered non-contributing. The sloping and embankments appear unaltered as does the grading. Slight modifications to the segment's surface have diminished its integrity of materials only slightly. The road is characterized by limited sight distance and lack of clear zones throughout the segment's right-of-way. Those aspects preserve its integrity of feeling, giving drivers the experience of traveling on a truly historic roadway along the craggy shore of the Strait of Juan de Fuca.

#### **SR 20 Deception Pass**

A three-mile segment of SR 20 within Deception Pass State Park is eligible for listing on the NRHP. The segment appears to maintain its alignment synonymous with its period of significance. It is characterized by narrow lanes, shoulders, minimal clear zones, and reduced site distances. The segment is the shortest eligible stretch of highway in this study and barely meets the minimal requirement of three miles to be evaluated by this study. Still, this segment possesses the most significant collection of contributing elements than any other eligible segment. The segment includes three bridges, two listed in the NRHP and one eligible, and a series of wooden guardrails installed by the Civilian Conservation Corps (CCC). Some of the guardrails have been replaced with steel beams incased by wooden posts, which give it the appearance similar to the original rails. An HPI has been completed for this segment.