

Parkway sweeping through Carolina rhododendron at Craggy Gardens, NC. Parkway entrance sign, inset, 1940.



Road cut and parapet wall at Devils Garden, NC, 1930s.

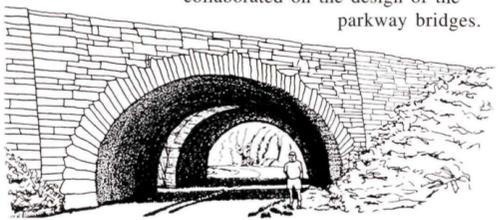
The Blue Ridge Parkway (BLRI) was documented in 1996-97 by the Historic American Engineering Record (HAER), a division of the National Park Service, U.S. Department of the Interior. This recording project was cosponsored by the the Federal Highway Administration's Federal Lands Highway Office, through the NPS Park Roads and Parkways Program. The collection of drawings, photographs and historical reports is available through the Prints and Photographs Division at the Library of Congress.

This leaflet was produced by HAER in 2000-02 in cooperation with the National Park Foundation. Design by Todd Croteau, Richard Quin, and Christopher Marston. Text by Richard Quin. Photographs dated 1996 by David Haas, HAER. All historic photographs dated 1950s and earlier from the Blue Ridge Parkway Archives.



Virginia Route 89 is the only double arch bridge on the parkway, 1996.

BRIDGES
The most distinctive architectural feature of the Blue Ridge Parkway is its outstanding collection of bridges and grade separation structures, which allow the parkway to cross streams or pass safely over or under other roads. Many of these 168 structures have a rustic stone appearance that blends well with the mountain landscape; others are sleek modern steel and reinforced concrete structures. Bureau of Public Roads engineers and National Park Service landscape architects collaborated on the design of the parkway bridges.



Linville River Bridge, 1946.

Many of the grade separation structures appear to be old-style stone arch bridges but are actually reinforced concrete structures. They were constructed by erecting stone arch rings, abutments and spandrel walls, then pouring concrete on a network of steel reinforcing rods. The stonework is not merely decorative, but serves as the form for the concrete frame. All but one of the overpasses, or grade separation structures carrying roadways over the parkway, are stone-faced arch structures. Many underpasses bearing the parkway over other roads are stone-faced arch structures as well.

The stone facing for these structures was a hallmark of the rustic style of architecture employed by the National Park Service, which dictated the use of materials that would enable structures to harmonize with their environments. The stone was generally obtained from quarries located near the construction site. In other cases, stone was obtained from rock cuts created during the construction of the roadway. As the parkway traverses several distinct geological areas over its nearly 500-mile length,



Stone-faced culverts and bridges contribute to the parkway's rustic character. Top left: Virginia Route 460 Underpass; bottom left: Virginia Route 8 at Tuggle Gap, 1996; above: Meadow Creek Culvert.



Rocky Mountain Viaduct, 1996.

the type and appearance of the stone used in the work varies from location to location.

Different arch shapes were employed, the choice being dictated by the length of span and topographic conditions. Most were segmental arches rising from straight-sided abutment walls. The elliptical arch was occasionally used where there was sufficient horizontal clearance to carry the arch all the way to the ground, usually where the parkway intersected primary roads. Circular arches were employed for some narrower spans. Many bridges are curved or skewed, crossing a road or



Rustic south portal at Bluff Mountain Tunnel, 1996.

stream on a diagonal so as not to interrupt the flow of the roadway.

After World War II, prices for masonry construction increased sharply and new construction technologies were available. Parkway planners began designing steel girder structures, prestressed concrete structures, and concrete box girder structures though the rustic stone-faced bridges were still occasionally employed.

VIADUCTS
Viaducts are elevated roadway sections carrying the road high above dry ravines or across the shoulders of mountains where extensive and aesthetically unpleasing fill sections would otherwise be required. The earliest of these is the Rocky Mountain Viaduct, constructed in 1937 on the northern section of the parkway at milepost 35. This steel girder structure is supported by arched stone piers and stone-faced abutments, and is the only viaduct to feature this treatment. Most other parkway viaducts are steel girder structures supported by reinforced concrete or steel piers.

The dramatic Linn Cove Viaduct at milepost 304 was built to carry the parkway over the shoulder of Grandfather Mountain without sacrificing the beautiful mountain's fragile terrain. This innovative structure, a segmental cantilever structure erected using continuous construction, was constructed of 153 precast concrete box girder segments supported by post-tensioned box piers cast on site. The 1,250 foot structure was completed in 1983 at a cost of nearly \$10 million. The structure attracted considerable acclaim by engineers and the general public, and the American Society of Civil Engineers soon designated it a National Civil Engineering Landmark.

TUNNELS
Twenty-six tunnels carry the parkway through mountain spurs and ridges. Twenty-five of these are in North Carolina; the Bluff Mountain Tunnel at milepost 53.1 is the only tunnel located in Virginia. The tunnels were often constructed to reduce excessive landscape scarring that open cuts would entail, though in several cases they enabled the parkway to cross through ridges in the

interest of maintaining the most desirable route location. Most of the tunnels were constructed with drilling "Jumbos," truck-mounted platforms equipped with water-cooled drills. The drills would bore into the substrata, after which the Jumbo would be removed and blasting charges would be placed in the holes. The distinctive stone masonry portals on most parkway tunnels were generally not part of the original construction, but were added later, mostly in the 1950s and 1960s.

OVERLOOKS
Most of the parkway's 264 scenic pull-offs provide stunning vistas and panoramas of near and distant mountain scenery; local residents often called them "balconies" as they were just that, a place from which to take in the view. Other pull-offs provide parking to allow motorists to inspect an interesting resource or take a stroll on one of the parkway trails. The overlook locations were carefully selected during the initial reconnaissance surveys.



Walkway beneath the James River Bridge, 1996.

There are two basic types of overlook. The primary type affords a picturesque vista, often carefully framed by landscape plantings. A second type features interesting cultural or natural resources, often interpreted by a gunboard sign or interpretive easel, or provides access to a hiking trail. The overlooks may be simple road widenings, "eyelid" overlooks with the parking separated from the roadway by a planted or grassy island, or more elaborate spur or loop roads away from the parkway.

BUILDINGS
The parkway preserves a variety of historic buildings, either as interpretive exhibits or as picturesque roadside features. With the exception of the imposing neoclassical estate of textile magnate Moses Cone, the structures tend to be modest structures, mostly simple log cabins. The early parkway planners thought the log cabin symbolized pioneer Appalachia, and preserved or relocated a good

number of log structures to points along the road. Ironically, they removed a number of earlier frame houses because they did not meet their stereotypical vision of the Appalachian past.

For its own construction, parkway planners adopted their own variant of the prevailing "rustic style" of architecture adopted in the national parks. They wanted their own structures to reflect the architecture of the region, and consequently took on the forms of cabins, sheds and barns in order to enhance a "backwoods feeling." Structures would employ timber beam construction, shake roofs, stone chimneys and exterior porches. Even the "driftwood gray" color was specified to present a weathered appearance.



The service station area at Doughton Park offers food, fuel and camping supplies, ca. 1950.

With few exceptions, even modern structures along the parkway, such as the 1989 Linn Cove Visitor Center or the 1999 Everhardt Headquarters Building at Asheville continue to reflect pioneer architecture through their use of native materials, allowing them to harmonize with the rugged landscape.

RECREATIONAL AREAS
One of the key features that distinguishes the Blue Ridge Parkway from ordinary state and federal highways is its integral chain of recreational areas or parks, each with unique features making them destinations in themselves. Facilities in the parks range from picnic areas and coffee shops in the smaller areas, to campgrounds, restaurants and lodges and extensive hiking trail systems in the larger recreational areas. In addition to providing for outdoor recreation, the parks function as service areas where motorists may obtain meals, purchase supplies for picnics, or refuel their automobiles.



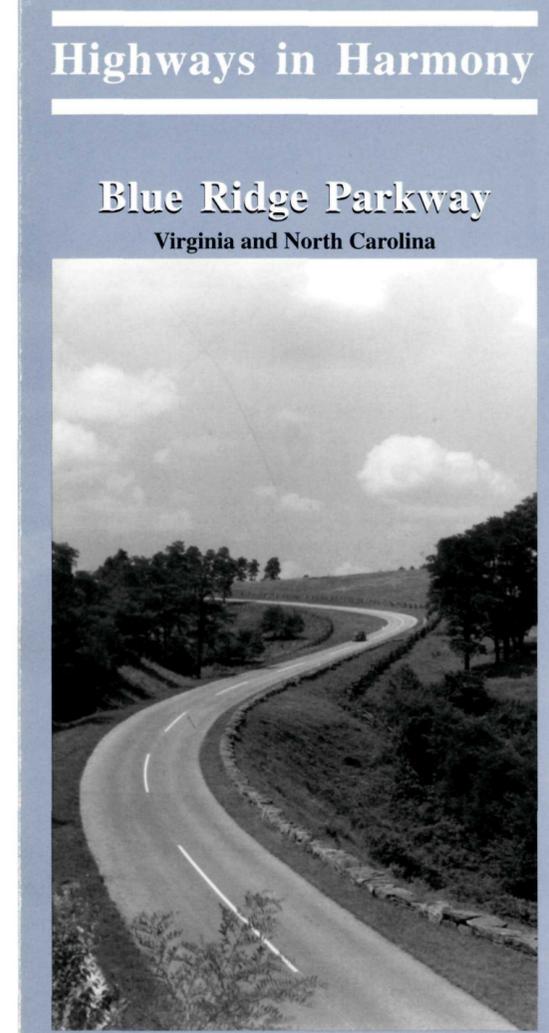
The timber shelter at Craggy Gardens typifies the rustic style employed on the parkway.



Many wayside areas interpret pioneer life in Appalachia, including demonstrations.



Picnic areas encourage motorists to stop and enjoy a basket meal, ca. 1950s.



Highways in Harmony

Blue Ridge Parkway

Virginia and North Carolina

The Blue Ridge Parkway winds near Doughton Park, North Carolina, 1950.



The pastoral landscape at sweeping Belchers Curve is protected under scenic easements, 1996.

The Blue Ridge Parkway is many things. It is the longest road planned as a single unit in the United States. It is an elongated park, protecting significant mountain landscapes far beyond the shoulders of the road itself. It is a series of parks providing the visitor access to high mountain passes, splendid natural “gardens” of flowering mountain plants, waterfalls and water gaps, deep forests and upland meadows. It is a continuous series of panoramic views, the boundaries of its limited right-of-way rarely apparent and miles of the adjacent countryside seemingly a part of the protected scene. It is a “museum of the managed American countryside,” preserving the rough-hewn log cabin of the mountain pioneer, the summer home of a textile magnate, and traces of early industries such as logging railways and an old canal. It is miles of split-rail fence, moss on a wood shingle roof, broomcorn and flax in a pioneer garden. It is the fleeting glimpse of a deer, a wild turkey or a red fox, or for those who prefer their animal life less wild, herds of cows grazing in pastures or horses trotting in fields. It is a chain of recreational areas, offering motorists a spot to picnic in the woods, a place to sleep overnight in a campground or a rustic lodge, as well as opportunities to refuel their vehicle, enjoy a meal, or purchase a piece of fine regional handicraft. It is the product of a series of major public works projects which provided a boost to the travel and tourism industry and helped the Appalachian region climb out the depths of the Great

Depression. The Blue Ridge Parkway is all these things and more, so it should come as no surprise that this is the most heavily visited unit in the National Park System.

“CREST OF THE BLUE RIDGE HIGHWAY”
The Blue Ridge Parkway was not the first planned scenic road through this mountain chain. In 1906, North Carolina state geologist Joseph Hyde Pratt proposed a scenic toll road down the spine of the Blue Ridge Mountains from Marion, Virginia to Tallulah, Georgia. In 1914, Dr. Pratt secured a charter for the “Appalachian Highway Company.” Construction began between Altapass and Pineola, North Carolina, but the outbreak of World War I brought the work to a halt. Today, a one-mile segment of the Blue Ridge Parkway between mileposts 317.6 and 318.7 follows the route of Pratt’s road.

PARKWAY PROPOSED

Construction of the Skyline Drive through Shenandoah National Park was the chief inspiration for the Blue Ridge Parkway. Begun during the Depression as a public works project, the scenic mountain highway attracted tremendous attention. When President Franklin Roosevelt visited the project in 1933, Virginia Sen. Harry F. Byrd recommended the roadway be extended southwest to the new Great Smoky Mountains National Park. Roosevelt eagerly endorsed the proposal, and the governors of Virginia, North Carolina and Tennessee

appointed a planning team to bring the project to fruition. On Nov. 24, 1933, Interior Secretary Harold Ickes approved the construction of the new “Park-to-Park Highway” as a public works project.

Ickes authorized \$4 million of public works funds to begin construction and hired Stanley L. Abbott, a young landscape architect with New York’s Westchester County parkway system, to oversee planning for the project. Abbott’s role in the parkway’s development was critical. He promoted the concept of the parkway as a chain of parks and recreational areas, each a destination in itself. He also suggested preserving views beyond the parkway boundaries through the use of scenic easements and presented the motorist with carefully crafted, ever-changing pictures of Appalachian scenery and culture. Abbott is remembered as the “father of the Blue Ridge Parkway.”

“THE WAR BETWEEN THE STATES”

The route of the new road had to be determined before construction could begin. The original concept provided for a road leading southwest from Shenandoah National Park down the Blue Ridge into North Carolina, then crossing the Unaka Mountains into Tennessee for the final approach to the Great Smoky Mountains National Park. When field parties reported on several alternative routes, North Carolina and Tennessee proponents began to argue. North Carolinians, most notably the Asheville Chamber of Commerce, wanted the southern section to stay in their state all the way to the Smokies, while Tennesseans demanded their promised share of the road. Both states recognized the tremendous tourism potential of the road and lobbied hard to have the road



The parkway loops over Buck Creek Bridge, 1942.

located through their state. After more surveys and intensive lobbying, Secretary Ickes approved the Virginia-North Carolina route.

CONSTRUCTION BEGINS

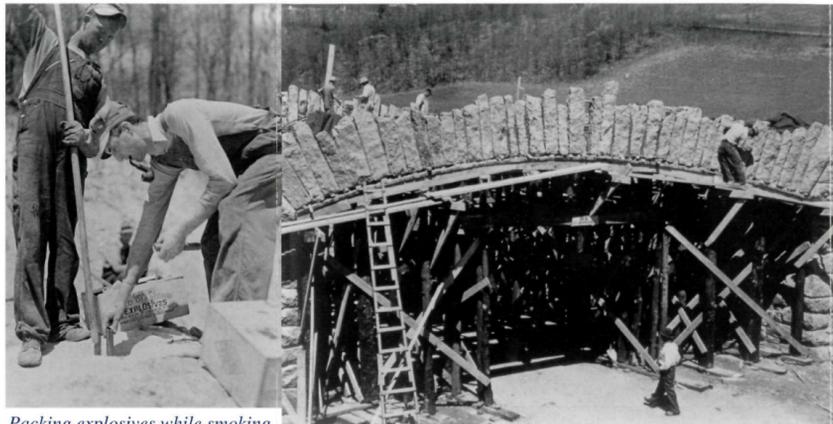
The project’s authorization specified that the states would purchase the land for the parkway and the federal government would build the road. Following final field surveys, state land officers purchased the land for the right-of-way.

On September 11, 1935, construction of the first 12.5-mile section began near Cumberland Knob in North Carolina. Work in Virginia began the following February. The parkway was not constructed as one continuous project, but instead was divided into 45 separate construction units. This approach was necessitated by delays in acquiring land, but it also enabled parkway contractors to hire more people to work at the same time.

For its first three years, the project existed under the authorization issued by Ickes in his role as federal public works administrator. For want of a better name, the project was generally called the “Appalachian Scenic Highway.” Mountain folk watching its early construction abbreviated this to “The Scenic.” On June 30, 1936, Congress formally authorized the establishment of the “Blue Ridge Parkway” and placed it under the jurisdiction of the National Park Service.

NEW DEAL WORK PROGRAMS

While most construction was carried out by private contractors, a variety of New Deal public works programs played important roles in the parkway’s development. Some roadway construction was carried out by the Works



Packing explosives while smoking a pipe, ca. 1935.

Erecting stone facing for a bridge, 1935.

Progress Administration. The purpose of the WPA was to put as many men to work as possible, so hand labor was used extensively, even when power equipment might have been more efficient. WPA crews cleared brush, drilled rock with hand drills for blasting, and performed other manual labor. Pay was low—\$55 a week in the beginning—but the income was a godsend for many mountain families. Another New Deal program utilized by the parkway was the Emergency Relief Administration. ERA crews carried out landscape work and development at parkway recreational areas. The best-known public works program was the Civilian Conservation Corps. Four CCC camps were established on or adjacent to the parkway, and their crews of young men toiled at roadside cleanup, planting, grading slopes for scenic effect, and improving roadside fields and forests.

Most relief programs were disbanded with the outbreak of World War II. During the war, some landscape and park development work was carried out by conscientious objectors organized under the Civilian Public Service program. In recent years, Student Conservation Association and Youth Conservation Corps workers have completed valuable projects.



The CCC transplants a tree, ca. 1936.

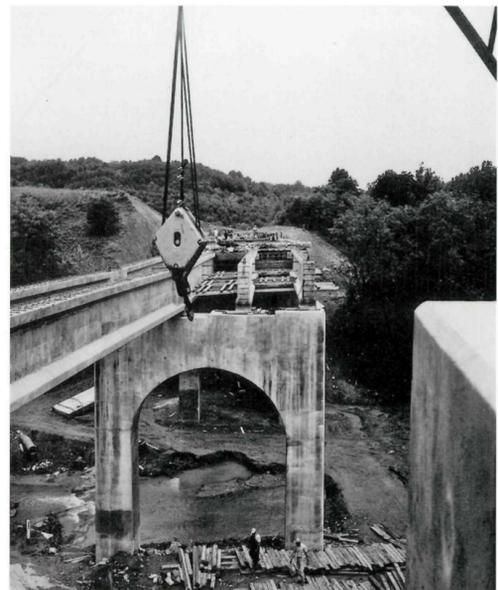
The onset of hostilities brought the work largely to a halt. Construction funds were impounded, and many parkway employees left to join the armed services. Use of the completed sections was very light due to gasoline and tire rationing and a temporary ban on recreational driving. The suspension of the New Deal relief programs stripped the parkway of its main forces engaged in landscape and development work. At the end of the war, the parkway had a difficult time converting back to peacetime operations. Furloughed personnel returned slowly. Much of the equipment had been declared surplus and turned over to the military, leaving the parkway short of cars, trucks and maintenance equipment. Funds were difficult to obtain, and postwar construction proceeded slowly.



Enjoying the view at Purgatory Mountain Overlook, 1952.

WARTIME DELAYS

By the outbreak of World War II, over \$20 million had been spent on construction. Some 170 miles were open to travel, and another 160 miles were in some stage of construction. The onset of hostilities brought the work largely to a halt. Construction funds were impounded, and many parkway employees left to join the armed services. Use of the completed sections was very light due to gasoline and tire rationing and a temporary ban on recreational driving. The suspension of the New Deal relief programs stripped the parkway of its main forces engaged in landscape and development work. At the end of the war, the parkway had a difficult time converting back to peacetime operations. Furloughed personnel returned slowly. Much of the equipment had been declared surplus and turned over to the military, leaving the parkway short of cars, trucks and maintenance equipment. Funds were difficult to obtain, and postwar construction proceeded slowly.



Back Creek Bridge under construction, 1952.

MISSION 66

By the mid-1950s, only about one-half of the Blue Ridge Parkway had been completed. Much of the remaining work involved difficult construction in more rugged terrain than earlier sections. Meager postwar appropriations limited the extension of the road. The impetus for the completion of most of the remaining sections was a multi-year NPS development program known as Mission 66.

Under this ten-year program, the pace of construction accelerated. In 1958, projects totaling \$16 million were in progress, an all-time record for the parkway. Most of the remaining gaps on the parkway were completed during the Mission 66 program. By its end in 1966, only 7.7 miles remained incomplete. In addition to roadway construction, Mission 66 was responsible for numerous

1946 Work resumes after war, but tight appropriations limit the pace of construction.

1941 Construction suspended due to outbreak of war; 170 miles of parkway is now complete; 300 more remain unfinished.

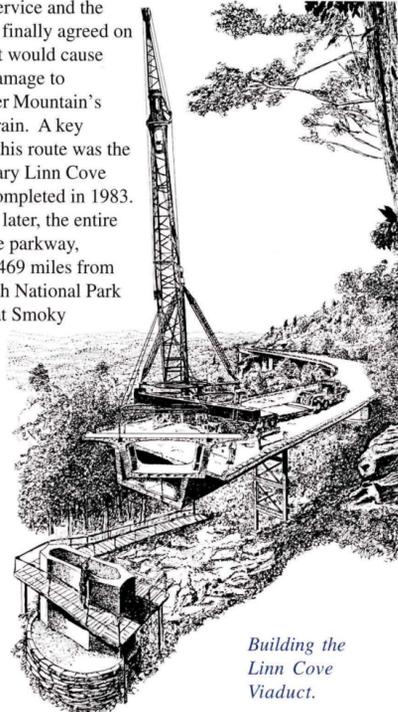
1956-66 NPS “Mission 66” development program pushes work towards completion; at the end of project, only 7.7 miles remain unfinished.

1983 Construction of the Linn Cove Viaduct along Grandfather Mountain closes the “missing link”.

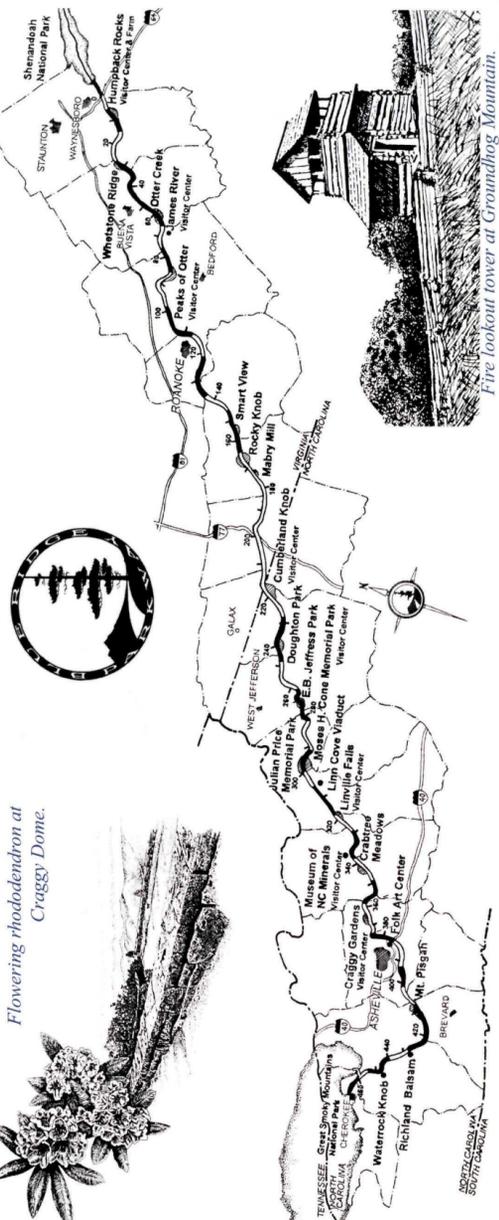
other improvements including campgrounds, visitor centers, lodges and coffee shops, and other public use facilities.

THE MISSING LINK

By 1966, the parkway was more than 95% complete, but it would take another two decades to complete the 7.7-mile “missing link” at Grandfather Mountain in North Carolina. The National Park Service made several unsuccessful attempts to acquire the right-of-way, but the landowner objected strenuously to proposals that he insisted would destroy the beauty of his large private recreational area. A proposed plan to tunnel under a part of the mountain likewise met with objections. In the 1970s the Park Service and the landowner finally agreed on a route that would cause minimal damage to Grandfather Mountain’s rugged terrain. A key feature of this route was the revolutionary Linn Cove Viaduct, completed in 1983. Four years later, the entire route of the parkway, extending 469 miles from Shenandoah National Park to the Great Smoky Mountains National Park, was opened to public travel.



Building the Linn Cove Viaduct.



Flowering rhododendron at Craggy Dome.

Fire lookout tower at Grandfather Mountain.

1906 “The Crest of the Blue Ridge Highway” proposed; work on this private toll road gets underway in 1914, but is halted by World War I.	January 1933 Franklin Delano Roosevelt inaugurated President at the height of the Great Depression.	August 1933 Roosevelt approves plan for an “Appalachian Scenic Highway” to connect Shenandoah and Great Smoky Mountains national parks.	December 1933 Project turned over to the National Park Service; Stanley Abbott appointed acting superintendent.	1934 The “War Between The States” results in a decision to route the southern portion of the parkway through North Carolina; no route through Tennessee.	September 1935 Construction begins near Cumberland Knob in North Carolina.	June 1936 The project is renamed “The Blue Ridge Parkway.”	1941 Construction suspended due to outbreak of war; 170 miles of parkway is now complete; 300 more remain unfinished.	1946 Work resumes after war, but tight appropriations limit the pace of construction.	1956-66 NPS “Mission 66” development program pushes work towards completion; at the end of project, only 7.7 miles remain unfinished.	1983 Construction of the Linn Cove Viaduct along Grandfather Mountain closes the “missing link”.	September 1987 The entire 469.9-mile parkway is open for travel.	1996-97 Historic American Engineering Record documents the parkway.
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Timeline