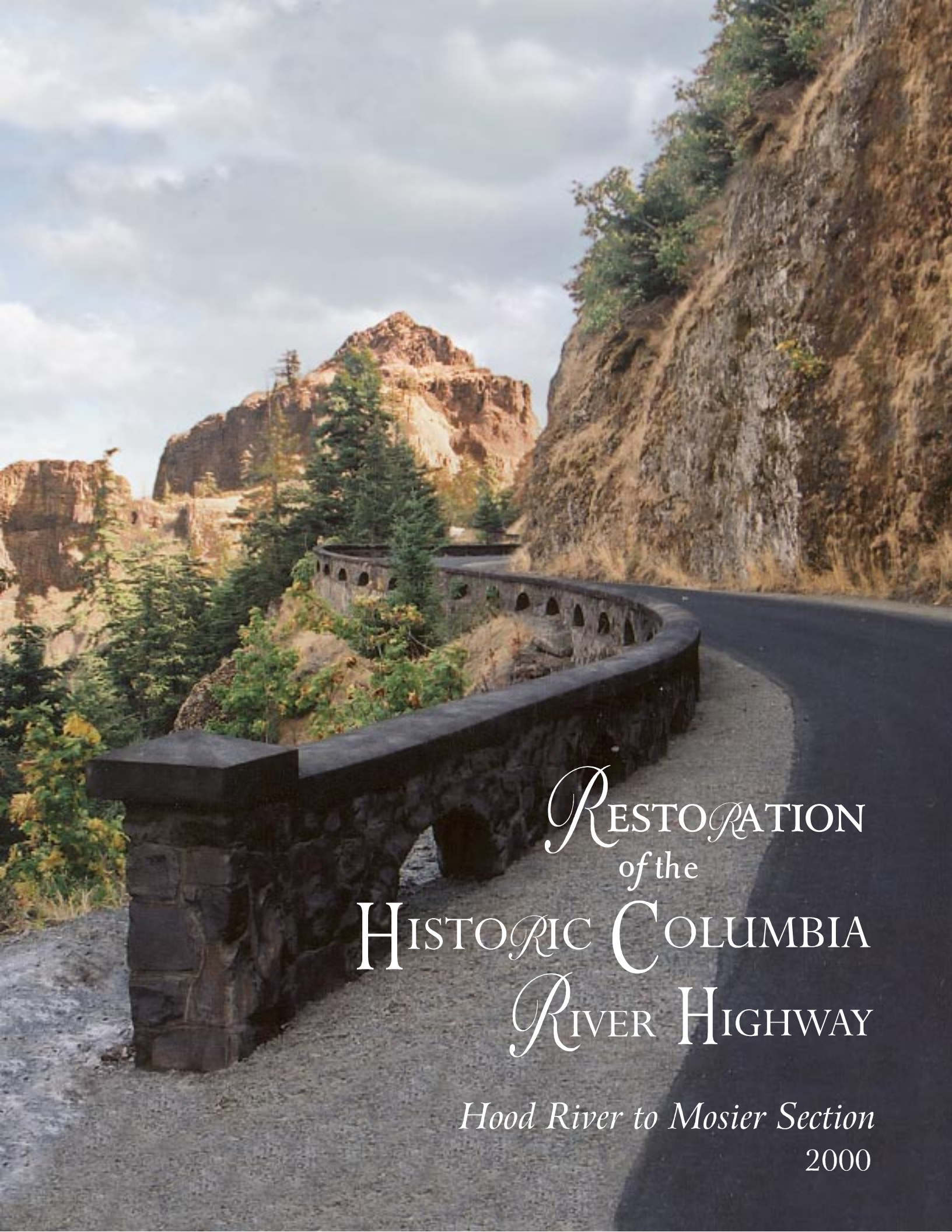

Restoration of the Historic Columbia River Highway

Hood River to Mosier Section

2000

Restoration of the Historic Columbia River Highway

Expanded Construction Narrative

Hood River to Mosier - Phase 1 Summary
Hood River to Mosier - Phase 2
Hood River to Mosier - Phase 3C
Hood River to Mosier - Visitor Contact Station
Hood River to Mosier - Parks
Hood River to Mosier - Roads

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RESTORATION of the HISTORIC COLUMBIA RIVER HIGHWAY

EXPANDED CONSTRUCTION NARRATIVE

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Introduction

Built between 1913 and 1922, The Historic Columbia River Highway was America's premier highway. It combined breathtaking scenic beauty with magnificent engineering, connecting The Dalles to Troutdale on the Oregon side of the Columbia River. Some sections of the Historic Highway are still in use today, but many were closed between 1930 and 1960 when the new, water-level route was constructed. In the early 1980s a citizen's movement, with the support of Oregon Sen. Mark O. Hatfield, was successful in initiating a goal of restoring these closed sections of the Historic Highway.

In 1987, the Oregon Legislature created the Historic Columbia River Highway Advisory Committee (HCRHAC), to advise the Oregon Department of Transportation (ODOT) and the Oregon Parks and Recreation Department (OPRD) regarding restoration work on the Historic Highway. The committee identified the section of Historic Highway between Hood River and Mosier as the highest priority to reopen. After years of design development, construction started in 1995. This narrative will highlight the construction phase of six different projects within this section of the Historic Highway, while at the same time attempting to explain the "full story" of restoring the Historic Highway between Hood River and Mosier into a State Trail. Even though many of the projects overlapped, they will be described separately.

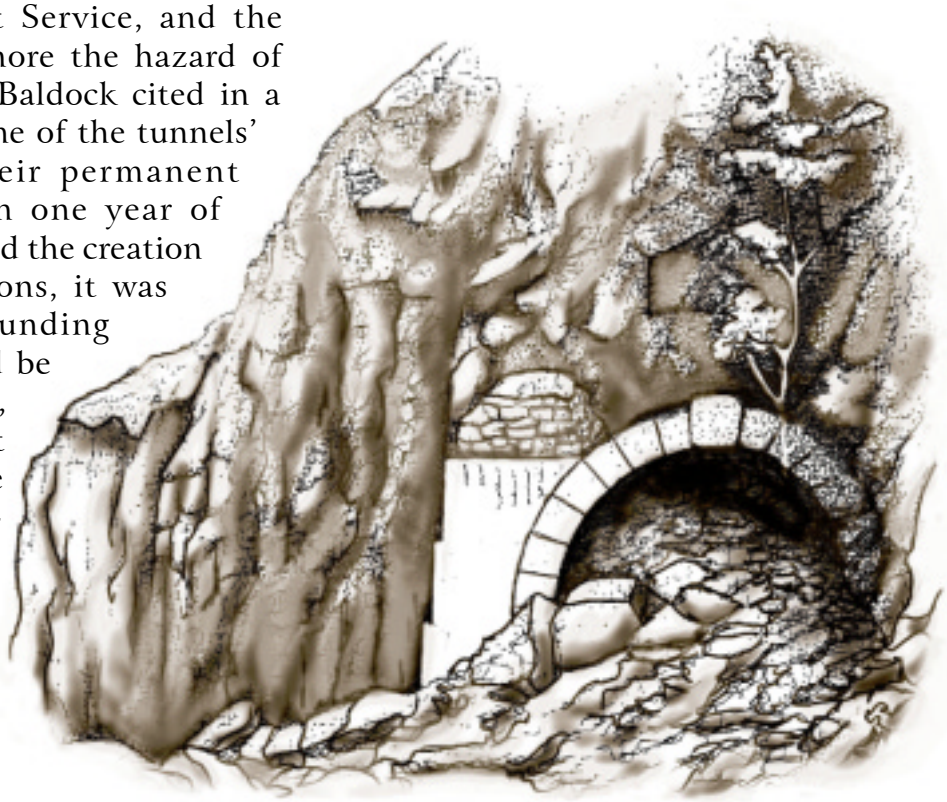
An aerial photograph taken in July of 1987 looking westward over the East Portal of the Mosier Twin Tunnels. Only a small portion of the concrete portal and keystone pattern was visible above the backfill.

Right: An aerial photograph looking south at the Mosier Twin Tunnels. The white concrete in the center right of the picture is the West Portal of the West Tunnel. In the upper left middle of the photo is the West Portal of the East Tunnel and just to the left of it was what remained of the Cliff Walk. Due to the topography as seen here, two separate tunnels were originally constructed, hence the name "Mosier Twin Tunnels."

During the early development phase of the reopening of the Historic Highway between Hood River and Mosier, ODOT engineers faced a monumental task at the Mosier Twin Tunnels. Back in 1917, since the railroad owned the flat land along the Columbia River, engineer John A. Elliot was forced to locate the highway away from the Columbia River and design tunnels through steep basalt cliffs. After completion of the tunnels in 1921, and for the next 35 years, the problem of falling rocks was a constant hazard. In early 1953, a large rockfall near the West Portal, with individual boulders ranging from six inches to three feet in diameter scattered debris, damaging vehicles and injuring motorists. Shortly thereafter, State Highway Engineer Robert H. Baldock closed the tunnels and diverted traffic to the almost completed water-grade route below. In 1954, the Mosier Twin Tunnels were closed and completely filled with rock in an attempt to stabilize the rock formation and to keep out trespassers.

To reopen the highway, ODOT engineers, OPRD officials, the Columbia River Gorge Commission, US Forest Service, and the HCRHAC could not ignore the hazard of falling rocks – an issue Baldock cited in a letter he wrote at the time of the tunnels' closing advocating their permanent closure. After less than one year of development meetings and the creation of different design options, it was decided that, due to funding issues, the project would be split into many separate, smaller projects. The first project would open the tunnels and use present-day technology to make the tunnels safe. The second project would build a 708-foot long rock catchment structure that pedestrians could safely walk under and be shielded from the falling rock from the cliff above.

To confirm that there was still a rockfall problem west of the Mosier Tunnels, Nancy Reed of the ODOT Dalles office performed a rockfall count. Between April 1, 1994 and Nov. 4, 1994 (not even during the highest rockfall period during the rainy season), there were 1,448 rocks counted that were between two and 64 inches in diameter. The largest rock weighed 1,500 pounds.

With the opening of the tunnels and catchment structure under way, the third design phase was to restore the roadway, build a trailhead parking lot and construct a visitor center for the Highway trail.

This narrative will first explain the two phases of work at the Tunnels, then cover the construction of the trailheads, and finally describe the restoration of the road itself. The purpose of this narrative is to explain the work performed and document what was learned during project construction.