

HCRH History



HCRH History

Genesis

At the beginning of the twentieth century, the automobile and bicycle were gaining importance as transportation vehicles. Unfortunately, the dirt roads that were sufficient for horse-and-buggy or walking did not make the grade for cars and trucks. While there were 12,000 automobiles in Oregon in 1915, paved roads extended barely 25 miles in any direction from Portland. During Oregon's rainy season, unpaved roads were impassable. One campaign slogan was "Get Oregon out of the Mud."

Sam Hill advocated for Good Roads in Oregon and throughout the world at the turn of the century. He toured the world examining road building techniques applicable to Oregon. He took Samuel C. Lancaster and Major Henry Bowlby to Europe for the first International Roads conference. On this trip they visited the Axenstrasse in Switzerland,

On the part of Lancaster, the highway is a religion, a work of art to be given the devotion of a lifetime.

Mark Woodruff, *Oregonian*, January 1, 1916

with its tunnel with three windows and arched rock walls later to be used along the HCRH. Sam Hill put his "money where his mouth was" by building a set of experimental roads, designed by nationally-renowned highway engineer Sam Lancaster, on his 7,000 acre ranch at Maryhill, at the east end of the Columbia River Gorge. After failed attempts to get a highway built through the Gorge in the state of Washington, Sam Hill

brought the whole Oregon Legislature out to Maryhill on his private train in 1913, plied them with good food and drink and showed off the experimental roads. The Legislature then reconvened in Salem and created the Oregon Highway Commission and Highway Department. Since then, this organization, now known as the Oregon Department of Transportation, has designed, constructed and maintained the major highways in the state.

In 1912, Simon Benson provided funds to construct a road around Shellrock Mountain with "honor men" (prison work-release). These men were not masons and the rock walls they constructed soon failed, but this beginning convinced many that a highway could be built through the Columbia River Gorge.

In 1913, Sam Hill convinced the Multnomah County Commission to build a road through the county in the Gorge, stating that they would "cash in on their crop of scenic beauty, year after year, without depleting it in any way", particularly if they hired Sam Lancaster to design the new road. The new road, now known as the Historic Columbia River Highway, used the best of the experimental asphalt pavements, patented "Warrenite." Now a National Historic Landmark, the road was the first scenic highway in the country. It incorporated the "lying lightly on the land" philosophy a decade before this became the goal for constructing roads in National Parks. The highway was constructed between 1913 and 1922 and became both a tourist attraction and the major commercial road link between Portland and eastern Oregon.

Key Individuals

Significant personalities in the construction of the HCRH include:

- 1) Samuel Hill—entrepreneur, Good Roads advocate and promoter of the HCRH⁴
- 2) Samuel C. Lancaster, highway engineer who located the highway in Multnomah County; set the standards for construction⁵
- 3) John B. Yeon—timber baron and Multnomah County Roadmaster during construction of the HCRH⁶
- 4) Simon Benson—timber baron who provided funding for construction of the HCRH in Hood River County and purchased and donated the area that is now Multnomah Falls, Wahkeena Falls and Benson State Park.⁷
- 5) Edgar Lazarus—architect of Vista House
- 6) Karl P. Billner—bridge designer
- 7) A. E. Doyle—architect of Multnomah Falls Lodge⁸

- 8) Lewis W. Metzger—bridge designer
- 9) John Arthur Elliott—designed and constructed Mitchell Point Tunnel⁹
- 10) Conde B. McCullough—state bridge engineer and designer of the Mosier Creek and Dry Canyon bridges, internationally-significant bridge designer¹⁰
- 11) Margaret Henderson—owner of Crown Point Chalet¹¹

For more information and additional individuals, see Appendix 1.

Design Approach

Samuel C. Lancaster designed a highway with very high aesthetic and engineering standards for its time, that “laid lightly on the land.” In addition, the highway was designed as a tourist facility, so, as Sam Hill said, “We can cash in year after year on our crop of scenic beauty, without diminishing it in any way.” Engineering standards included: maximum 5 percent grades, minimum 100-foot radius curves, patented Warrenite asphaltic-concrete pavement, and two-rail wooden guard fence. Rubble masonry parapet walls evoked the Axenstrasse of Switzerland. Recreational areas were designed along the highway.

⁴ For more information on Samuel Hill, see Krier, Patricia Connolly. “Toward a Civilized Wilderness: Samuel Hill’s Contribution to Pacific Northwest Highways, 1899-1916.” M.A. thesis, University of Oregon, 1984.; Tuhy, John E. Sam Hill, The Prince of Castle Nowhere. Portland: Timber Press, 1983.

⁵ For more information on Samuel C. Lancaster, see Bullard, Oral. Lancaster’s Road: The Historic Columbia River Scenic Highway. Beaverton, OR: TMS Book Service, 1982.

⁶ For more information on John Yeon, see Evers, Michael J. “John Yeon and the Construction of the Columbia River Highway.” M.A. thesis, San Diego State University, 1992.

⁷ For more information on Simon Benson, see Allen, Alice Benson. Simon Benson: Northwest Lumber King. Portland: Binsford and Mort, 1971.

⁸ “Multnomah Falls Lodge and Footpath, Nomination

to the National Register of Historic Places,” 1981.

⁹ Elliott, John Arthur. “The Location and Construction of the Mitchell Point Section of the Columbia River Highway, Oregon.” C.E. thesis, University of Washington, 1929.

¹⁰ For more information on Conde B. McCullough, see Hadlow, Robert W. Elegant Arches, Soaring Spans: C. B. McCullough, Oregon’s Master Bridge Builder. Corvallis: Oregon State University Press, 2001.

¹¹ See “The Guestbooks of Crown Point Chalet (1915–1927)”, transcribed and edited by Clifford D. Nelson, 2001.

The Historic Columbia River HIGHWAY

A selection of historic images and restored 1920s hand-painted glass slides depicting scenes of the original construction of the new Historic Columbia River Highway



Standing here I realized the magnitude of my task and the splendid opportunity presented. Instinctively there came a prayer for strong men and that we might have sense enough to do the thing in the right way... so as not to mar what God had put there... In that Gorge to the east were hidden waterfalls and mountain crags, dark wooded, fern clad caves, and all else that a wise creator (sic) chose to make for the pleasure and enjoyment of the children of men.

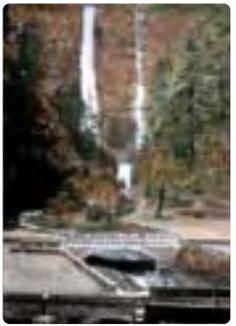
- Samuel C. Lancaster
-1913 from Portland Woman's Forum



The Toothrock Viaduct was one of eight "bridges over land" that were constructed to skirt hillsides.



The Historic Columbia River Highway was constructed between 1913 and 1922 with maximum 5% grades and two-rail wooden guardrail that became a national standard for guardrail.



Multnomah Falls is the most visited natural site in Oregon, with Berson Footbridge spanning the lower falls.



Simon Benson-timber baron-provided funding for construction of the Historic Columbia River Highway in Hood River County and purchased and donated the area that is now Multnomah Falls, Wahkema Falls and Berson State Park. In 1912 he provided funds to construct a road around Shellrock Mountain with "honor men" (prison work release). These men were not masons and the rock walls they constructed soon failed, but this beginning convinced many that a highway could be built through the Columbia River Gorge.



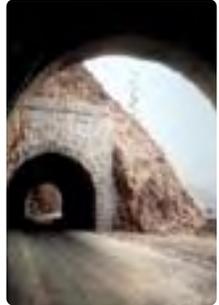
Horetail Bridge is so close to Horetail Falls that spray often crosses the road.



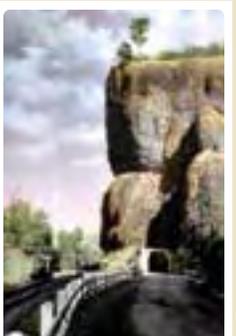
Just east of the city of Hood River, the Hood River Bridge was the longest bridge on the highway, leading to the Hood River Loops. The bridge was demolished in 1992.



Construction of the highway included recreational trails, including this bridge over Wahkema Falls.



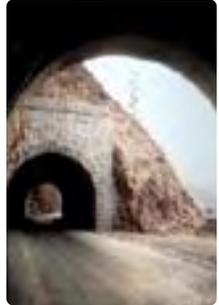
A hand painted glass slide from OOO's collection showing the Mosier Twin Tunnels in the 1920's. The tunnels were widened in 1938 and the rock key ring was replaced with an concrete key ring on both of the rock-tunnel portals.



Constructed in 1914, Oreonia Tunnel was the shortest of the four tunnels on the Historic Columbia River Highway and has been closed since the 1950s.



Historic photo of Mitchell Point Tunnel, also known as "the Tunnel of Many Vistas" because of its five "windows".



A hand painted glass slide from OOO's collection showing the Mosier Twin Tunnels in the 1920's. The tunnels were widened in 1938 and the rock key ring was replaced with an concrete key ring on both of the rock-tunnel portals.



This 1920s hand-painted glass slide was taken looking towards Crown Point and Vista House, with the rubble masonry parapet wall in the foreground. Vista House was constructed beginning in 1916 as an observatory, a "comfort station" (restrooms) and memorial to the Oregon pioneers.



A view from the Columbia River of Mitchell Point Tunnel. The tunnel was destroyed when Interstate 84 was widened to 4 lanes in 1966.



The design and execution of the oldest scenic highway in the United States were the product of two visionaries, the engineer and landscape architect Samuel C. Lancaster and the lawyer, entrepreneur and good roads promoter, Samuel Hill.

- Samuel Hill

Tourists want three things, a good road to drive on, something worthwhile to see, and something worthwhile to eat...We cash in, year after year, on our crop of scenic beauty, without depleting it in any way.

Figure 3—Original HCRH Poster (see inside for enlarged version)

The Historic Columbia River

HIGHWAY

A selection of historic images and restored 1920s hand-painted glass slides depicting scenes of the original construction of the now Historic Columbia River Highway



Standing here I realized the magnitude of my task and the splendid opportunity presented. Instinctively there came a prayer for strong men and that we might have sense enough to do the thing in the right way... so as not to mar what God had put there...in that (Gorge) to the east were hidden waterfalls and mountain crags, dark wooded, fern clad caves, and all else that a wise creator (sic) chose to make for the pleasure and enjoyment of the children of men."

Samuel C. Lancaster
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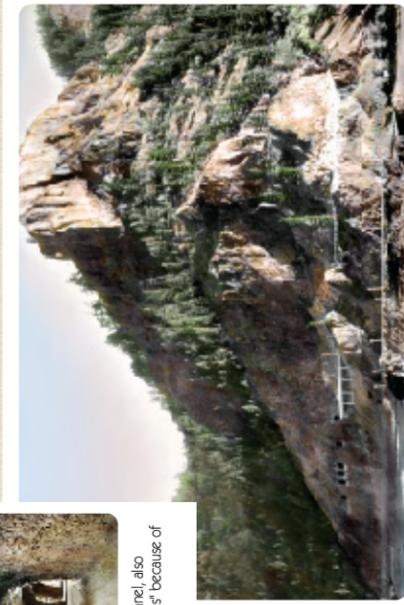


Horsetail Bridge is so close to Horsetail Falls that spray often crosses the road.

Construction of the highway included recreational trails, including this bridge over Wahkeena Falls.



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This 1920s hand-painted glass slide was taken looking towards Crown Point and Vista House, with the rubble masonry parapet wall in the foreground. Vista House was constructed beginning in 1916 as an observatory, a "comfort station" (restrooms) and memorial to the Oregon pioneers.



The Historic Columbia River Highway was constructed between 1913 and 1932 with maximum 5% grades and two-rail wooden guardrail that became a national standard for guardrail.



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A hand-painted glass slide from ODOT's collection showing the Master Twin Tunnels in the 1930s. The tunnels were widened in 1938 and the rock key ring was replaced with a concrete key ring on both of the mid-tunnel portals.

The design and execution of the oldest scenic highway in the United States were the product of two visionaries, the engineer and landscape architect Samuel C. Lancaster and the lawyer, entrepreneur and good roads promoter, Samuel Hill.

"Tourists want three things; a good road to drive on, something worthwhile to see, and something worthwhile to eat... We cash in, year after year, on our crop of scenic beauty, without depleting it in any way."

Samuel Hill



The following quotes describe the design approach:

Standing here I realized the magnitude of my task and the splendid opportunity presented. Instinctively there came a prayer for strong men and that we might have sense enough to do the thing in the right way . . . so as not to mar what God had put there. . . . In that (Gorge) to the east were hidden waterfalls and mountain crags, dark wooded, fern-clad caves, and all else that a wise creator [*sic*] chose to make for the pleasure and enjoyment of the children of men.

Samuel C. Lancaster
Oregon Journal, January 3, 1915

On starting the surveys our first business was to find the beauty spots, or those points where the most beautiful things along the line might be seen in the best advantage, and, if possible to locate the road in such a way as to reach them.

Samuel C. Lancaster
Oregon Journal, January 3, 1915

A careful study of the great gorge of the Columbia, revealed its wonderful beauty and the great possibilities for a scenic and commercial highway. It was decided that the best modern practice should be followed in building a road suited to the times, the traffic and the place. Such a road to have a minimum width of twenty-four feet, with extra width on all curves, and no radius less than one hundred feet. The maximum grade to be five per cent.

Samuel C. Lancaster
The Columbia: America's Great Highway

Beauty cannot be measured in dollars and cents. When the highway was built, great care was taken to keep the natural beauty all about and not to mar the landscape.

Every tree, flower, fern and shrub that grew by the roadside was kept, and only those that were within the exact path of the finished roadway were touched.

Samuel C. Lancaster
"The Revelation of Famous Highways"
American Civic Annual, 1929

Roadway, Bridge and Other Design Elements

Each bridge was designed for its particular setting. See the Historic American Engineering Record drawings in Appendix 15 explaining the following features:

- Scenic Inspiration
- Grading and Alignment
- Paving and Drainage
- Railings
- Masonry
- Viaducts
- Tunnels and tunnel construction
- The recreation areas of Multnomah Falls, Latourell Falls and Eagle Creek
- And the various bridge types used along the HCRH.

Losses over Time

Usage of the highway changed dramatically by the 1930s, with significantly more and larger vehicles. Lancaster and others began discussing a new, water grade route that would be straighter and flatter, while leaving the original route as scenic loops. This transformation began with the construction of Bonneville Dam. From 1935 to 1938 the section between the Dam and Cascade Locks was relocated and the old highway left for future use as a trail. Progress on the new facility continued through the 1950s,

HISTORIC COLUMBIA RIVER HIGHWAY MASTER PLAN

HISTORIC COLUMBIA RIVER HIGHWAY STATE TRAIL



The losses over time...



- The Oneonta Tunnel

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1954 - The east portal of the Mosier Twin Tunnels



A view of the deterioration of the rubble masonry parapet walls on the Rucklee Creek Bridge.



Prior to restoration, the railing in the Toothrock (above) and Rutton Point (below) Viaducts showed marked deterioration.

Many of the road's features, including bridge railings, rock walls, retaining walls and pavement fell into disrepair, even on the portions of the highway that remained open to traffic. In 1982, the HCRH bridge over the Hood River (see photo right), the longest bridge on the highway, was destroyed. People reacted—if the longest bridge can be removed, will not the whole highway be destroyed, piece-by-piece?





In many locations the old highway is overgrown with vegetation and the pavement is barely viable in some areas. Above is a photograph that was taken within the Eagle Creek to Cascade Locks section of the State Trail and at left a photograph taken near Toothrock.



Below and below left: These are photographs of the Rutton Point area prior to the renovations that have been completed in that section of the State Trail.





The Friends of the Columbia Gorge and the Historic Preservation League of Oregon (HPL/O) advocated for a different solution. With their urging, first, the highway was designated as a historic district, listed in the National Register of Historic Places. Then Congress included a provision in the Columbia River Gorge National Scenic Area Act that ODOT must prepare a plan for the HCRH. Once a committee developed a plan, Richard Ross (HPL/O) did not want to see this plan sit on a shelf. He proposed legislation, which was passed unanimously by the Oregon Legislature in 1987 that created an Advisory Committee to implement the plan.





Much of the remaining remnants of the old highway have been utilized as a rock catchment area for I-84





Above and at left: The original highway railings and rubble masonry parapet walls have deteriorated and require restoration. These are photographs of the Rutton Point area prior to the renovations that have been completed in that section of the State Trail.

The demolition of the Hood River Bridge in 1989 galvanized support for saving the remainder of the Highway. The first step in the process was listing the highway in the National Register of Historic Places on December 12, 1983, with the document "Columbia River Highway Historic District-Nomination of the Old Columbia River Highway in the Columbia River Gorge to the National Register of Historic Places" by Dwight Smith, Oregon Department of Transportation.





Many of the original viaducts and bridges have fallen into disrepair requiring, in some cases, major renovations and others replacement of the structure. The photograph at right is the old Eagle Creek Viaduct

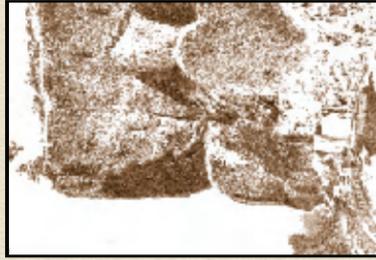




Figure 4—Recent Past Poster (see inside for enlarged version)

HISTORIC COLUMBIA RIVER HIGHWAY STATE TRAIL

The losses over time...



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1954-The west portal of the Mosier Twin Tunnels

Use of the highway changed dramatically by the 1930s, with significantly more and larger vehicles. Lancaster and others began discussing a new, water grade route that would be straighter and flatter, while leaving the original route as scenic loops. This transformation began with the construction of Bonneville Dam. Between 1935 and 1938 the section between the Dam and Cascade Locks was relocated and the old highway left for future use as a trail. Progress on the new facility continued through the 1950s, abandoning pieces of the highway between Warrendale and Mosier, including closure of the Mitchell Point Tunnel and Mosier Twin Tunnels. After the creation of the interstate system of highways, the water grade route was expanded from two lanes to four lanes, causing some additional damage to the original highway, including the elimination of the Mitchell Point Tunnel. By 1981, much of the historic highway had been forgotten between Warrendale and Mosier, with the remaining pieces that were open to motor vehicle traffic known by five different highway names: Crown Point Highway, Cascade Locks Highway, Mt. Hood Highway (in Hood River), Old Columbia River Highway Drive and Mosier-The Dalles Highway.

Many of the road's features, including bridge railings, rock walls, retaining walls and pavement fell into disrepair, even on the portions of the highway that remained open to traffic. In 1982, the HCRH bridge over the Hood River (see photo right), the longest bridge on the highway, was destroyed. People reacted-if the longest bridge can be removed, will not the whole highway be destroyed, piece-by-piece?



The Friends of the Columbia Gorge and the Historic Preservation League of Oregon (HPLO) advocated for a different solution. With their urging, first, the highway was designated as a historic district, listed in the National Register of Historic Places. Then Congress included a provision in the Columbia River Gorge National Scenic Area Act that ODOT must prepare a plan for the HCRH. Once a committee developed a plan, Richard Ross (HPLO) did not want to see this plan sit on a shelf. He proposed legislation, which was passed unanimously by the Oregon Legislature in 1987 that created an Advisory Committee to implement the plan.



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1. Columbia River Highway Inventory
2. Vista House Historic Structure Report
3. Columbia River Highway Guide for Maintenance
4. Columbia River Highway Options for Conservation and Reuse

Many of the road’s features, including bridge railings, rock walls, retaining walls and pavement fell into disrepair, even on the portions of the highway that remained open to traffic. In 1982, the HCRH bridge over the Hood River, the longest bridge on the highway, was destroyed. People reacted—if the longest bridge can be removed, will not the whole highway be destroyed, piece-by-piece?

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- restoring the highway,
- managing the facility as a continuous visitor attraction,
- tying together the communities of the Gorge
- connecting the pieces of the highway with recreation trails,
- providing visitor information, and

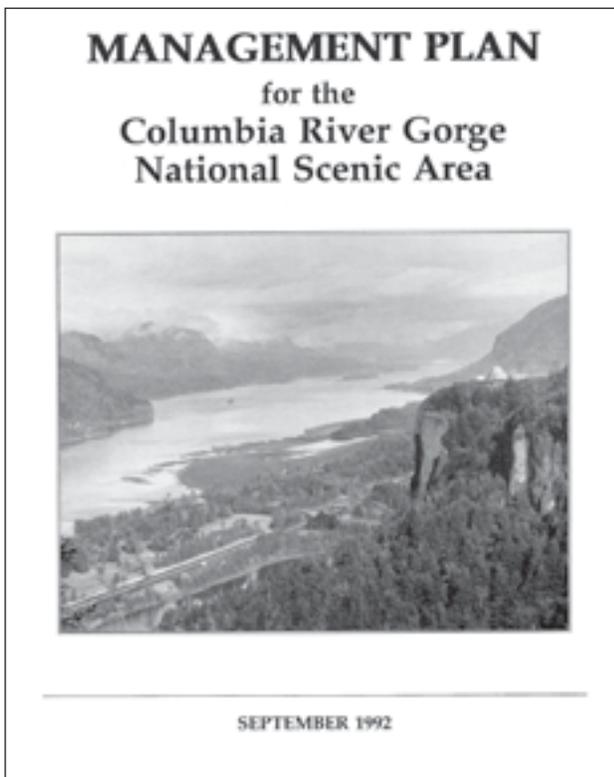


Figure 5—Columbia River Gorge National Scenic Area Management Plan

HISTORIC COLUMBIA RIVER HIGHWAY MASTER PLAN

HISTORIC COLUMBIA RIVER HIGHWAY STATE TRAIL



Restoration of the Historic Columbia River Highway is akin to restoring a priceless painting. It is a great privilege and responsibility to be the guardian of something this grand.

The Historic Columbia River Highway is a National Historic Landmark, All American Road and Oregon's Millennium Legacy Trail. The Historic Columbia River Highway is located within the Columbia River Gorge National Scenic Area. Funds from the Scenic Area Act and Federal Highway sources have been instrumental in efforts to restore and reconnect the Highway. Collectively, the Historic Columbia River Highway State Trail projects have received a Federal Highway Administration Design Excellence Award.



Hood River to Mosier Project

The reopening of the Hood River to Mosier section of the Historic Columbia River Highway was the highest priority project identified in "A Study of the Historic Columbia River Highway 1987". Once the Columbia River Gorge National Scenic Area Management Plan was completed, Senator Mark O. Hatfield secured appropriation of the funds authorized by the act for the Highway.

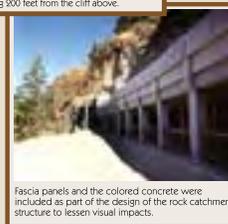
Picture left: The Mosier Twin Tunnels were backfilled and abandoned by 1954. This sketch from a photograph taken on March 12, 1999, shows the damaged West Portal of the western Mosier Twin Tunnel caused by a rockfall from the cliffs above the portal.



Phase one of the Hood River to Mosier Project included reopening the Mosier Twin Tunnels.



Rockfall hazards in the area west of the west portal of the Mosier Twin Tunnels required construction of mitigation in the form of a 700-foot long rockfall catchment structure.



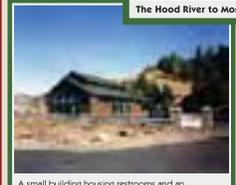
This structure is designed to absorb the energy of 5000-pound rocks falling 300 feet from the cliff above. Fascia panels and the colored concrete were included as part of the design of the rock catchment structure to lessen visual impacts.

Tanner Creek to Eagle Creek Project

This portion of the highway was abandoned in 1926 during the construction of Bonneville Dam, when the Toothrock Tunnel was constructed to bypass this area. This 1.4 mile trail includes the Toothrock Trailhead parking area. This was the first section of the Historic Columbia River Highway State Trail to be open to the public.



Picture right: The Eagle Creek Viaduct was damaged by a landslide and as part of the project it was repaired to its original condition.



The Hood River to Mosier (Parks) Projects

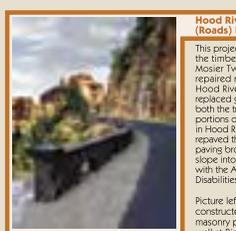
A small building housing restrooms and an interpretive area was constructed under the contract title of "Visitor Contact Station (Building)." It is now known as the Twin Tunnels Visitor Station.



The construction of the Senator Mark O. Hatfield West Trailhead on land near Hood River rehabilitated three gravel pits: Kobberg Quarry (photo-center), Hanel Quarry (edge of photo-left) and the George Quarry (edge of photo right).



The deteriorated railing on the Toothrock Viaduct was restored to its original condition as part of the project.



Hood River to Mosier (Roads) Project

This project completed the timber lining of the Mosier Twin Tunnels, repaired rock walls in Hood River County, replaced guardrail along both the trail and drivable portions of the Highway in Hood River County and reaved the trail. The paving brought the cross slope into compliance with the Americans with Disabilities Act.

Picture left: Newly constructed rubble masonry parapet rock wall at Bingen Overlook.



This project also included rehabilitation of the railings on both the Tanner Creek and Moffett Creek bridges (pictured above). Additional interpretive signs and caps for street signs in Cascade Locks and Hood River were also part of the Unit 2 project.

Moffett Creek to Tanner Creek Project

This section of the Historic Columbia River Highway State Trail was completed in two units, due to funding constraints. The original enhancement funds were not sufficient to complete the project, but allowed construction of the switchback, grooves (vegetated) retaining walls. These walls won a 1999 International Achievement Award - Award of Excellence from the Industrial Fabrics Association International. High Priority Project funds allowed completion of the project in 2000.



A new bridge, the Toothrock Tunnel Bridge, was required over the east portal of the Toothrock Tunnel. This project won an award for the best non-highway bridge.



ODOT Revises and revives a 1920 national standard

In 1920 the two-rail wooden guardrail used along the Historic Columbia River Highway became a national standard. In 1990 ODOT spent approximately \$40,000 to crash test a two-rail, steel-backed, wooden guardrail that evokes the look of the 1920 rails. When the crash test was successful, ODOT used funds authorized by the Columbia River Gorge National Scenic Area Act to replace the guardrail from Portland Women's Forum State Park to Alisworth and from Mosier to Chenoweth Creek.



Thematic Signing

The Western Federal Lands Highway Division designed and constructed thematic site signs along the Historic Columbia River Highway and State Route 14 in Washington within the Columbia River Gorge National Scenic Area. The signs shown below are located at the Starvation Creek State Park.

The sign pictured above is located at the Senator Mark O. West Trailhead. Senator Hatfield is pictured here reviewing the sign during the Hood River to Mosier (Parks) Trailhead Grand Opening Celebration.



Interpretive Signs

Porcelain enamel was selected for the interpretive panels because it can accurately produce the detail of photographs and is vandal resistant.



Vista House Restored

Oregon Parks and Recreation Department restored both the exterior and interior of Vista House, restoring this Oregon icon to its original design, including the tile roof and art glass.



Eagle Creek to Cascade Locks Project

This new undercrossing of Interstate 84 was constructed as part of the Historic Columbia River Highway State Trail Project between Eagle Creek and Cascade Locks.

Multnomah County applied for grants to develop and install interpretive signs along the Historic Columbia River Highway. This project was developed with many partners. This interpretive sign is located at Latourell Falls.

Figure 6—Current Condition Poster (see inside for enlarged version)

HISTORIC COLUMBIA RIVER HIGHWAY STATE TRAIL



Restoration of the Historic Columbia River Highway is akin to restoring a priceless painting. It is a great privilege and responsibility to be the guardian of something this grand.

The Historic Columbia River Highway is a National Historic Landmark, All American Road and Oregon's Millennium Legacy Trail. The Historic Columbia River Highway is located within the Columbia River Gorge National Scenic Area. Funds from the Scenic Area Act and Federal Highway sources have been instrumental in efforts to restore and reconnect the Highway. Collectively, the Historic Columbia River Highway State Trail projects have received a Federal Highway Administration Design Excellence Award.



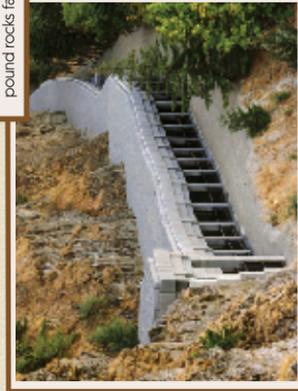
Hood River to Mosier Project

The reopening of the Hood River to Mosier section of the Historic Columbia River Highway was the highest priority project identified in "A Study of the Historic Columbia River Highway, 1987". Once the Columbia River Gorge National Scenic Area Management Plan was completed, Senator Mark O. Hatfield secured appropriation of the funds authorized by the act for the Highway.

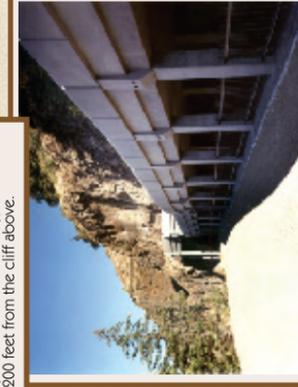
Picture left: The Mosier Twin Tunnels were backfilled and abandoned by 1954. This sketch from a photograph taken on March 12, 1992, shows the damaged West Portal of the western Mosier Twin Tunnel caused by a rockfall from the cliffs above the portal.



Phase one of the Hood River to Mosier Project included reopening the Mosier Twin Tunnels.



Rockfall hazards in the area west of the west portal of the Mosier Twin Tunnels required construction of mitigation in the form of a 700-foot long rockfall catchment structure.



This structure is designed to absorb the energy of 5000-pound rocks falling 200 feet from the cliff above.

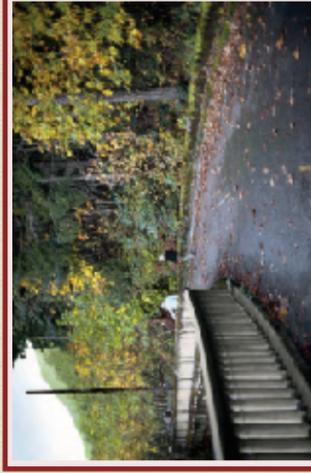
Fascia panels and the colored concrete were included as part of the design of the rock catchment structure to lessen visual impacts.



Tanner Creek to Eagle Creek Project

This portion of the highway was abandoned in 1936 during the construction of Bonneville Dam, when the Toothrock Tunnel was constructed to bypass this area. This 1.4 mile trail includes the Toothrock Trailhead parking area. This was the first section of the Historic Columbia River Highway State Trail to be open to the public.

Picture right: The Eagle Creek Viaduct was damaged by a rockslide and as part of the project it was repaired to its original condition.



The deteriorated railing on the Toothrock Viaduct was restored to its original condition as part of the project.



A new bridge, the Toothrock Tunnel Bridge, was required over the east portal of the Toothrock Tunnel. This project won an award for the best non-highway bridge.



The Hood River to Mosier (Parks) Projects

A small building housing restrooms and an interpretive area was constructed under the contract title of "Visitor Contact Station (Building)." It is now known as the Twin Tunnels Visitor Station.



The construction of the Senator Mark O. Hatfield West Trailhead on land near Hood River rehabilitated three gravel pits: Koberg Quarry (photo-center), Hanel Quarry (edge of photo-left) and the George Quarry (edge of photo right).



Hood River to Mosier (Roads) Project

This project completed the timber lining of the Mosier Twin Tunnels, repaired rock walls in Hood River County, replaced guardrail along both the trail and drivable portions of the Highway in Hood River County and repaved the trail. The paving brought the cross slope into compliance with the Americans with Disabilities Act.

Picture left: Newly constructed rubble masonry parapet rock wall at Bingen Overlook.



ODOT Revises and revives a 1920 national standard

In 1990 the two-rail wooden guardrail used along the Historic Columbia River Highway became a national standard. In 1990 ODOT spent approximately \$40,000 to crash test a two-rail, steel-backed, wooden guardrail that evokes the look of the 1920 rails. When the crash test was successful, ODOT used funds authorized by the Columbia River National Scenic Area Act to replace the guardrail from Portland Women's Forum State Park to Ainsworth and from Mosier to Chenoweth Creek.



Vista House Restored

Oregon Parks and Recreation Department restored both the exterior and interior of Vista House, restoring this Oregon icon to its original design, including the tile roof and art glass.



Moffett Creek to Tanner Creek Project

This section of the Historic Columbia River Highway State Trail was completed in two units, due to funding constraints. The original Enhancement funds were not sufficient to complete the project, but allowed construction of the (vegetated) retaining walls. These walls won a 1999 International Achievement Award - Award of Excellence from the Industrial Fabrics Association International High Priority Project. Funds allowed completion of the project in 2000.

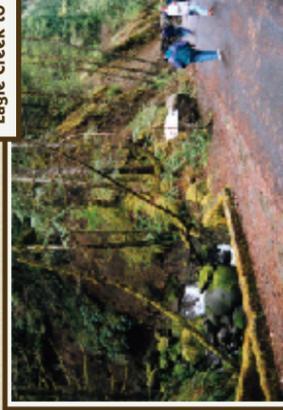
This project also included rehabilitation of the railings on both the Tanner Creek and Moffett Creek bridges (pictured above). Additional interpretive signs and caps for street signs in Cascade Locks and Hood River were also part of the Unit 2 project.

Thematic Signing

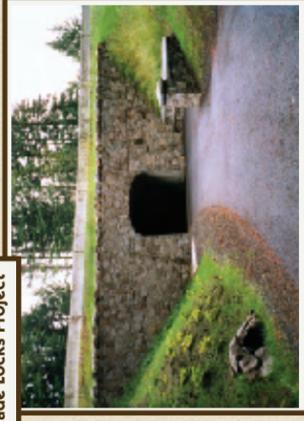
The Western Federal Lands Highway Division designed and constructed thematic site signs along the Historic Columbia River Highway and State Route 14 in Washington within the Columbia River Gorge National Scenic Area. The signs shown below are located at the Staveation Creek State Park.



The sign pictured above is located at the Senator Mark O. Hatfield West Trailhead. Senator Hatfield is pictured here during the Hood River to Mosier (Parks) Trailhead Grand Opening Celebration.



The Western Federal Lands Highway Division designed and constructed the Historic Columbia River Highway State Trail between Eagle Creek and Cascade Locks. The part of the trail shown here is located at Ruckle Creek.



This new undercrossing of Interstate 84 was constructed as part of the Historic Columbia River Highway State Trail Project between Eagle Creek and Cascade Locks.

Interpretive Signs



Multnomah County applied for grants to develop and install interpretive signs along the Historic Columbia River Highway. This project was developed with many partners. This interpretive sign is located at Latourel Falls.

Eagle Creek to Cascade Locks Project

- preserving and enhancing visual qualities of the highway and its corridor.

The demolition of the Hood River Bridge in 1982 galvanized support for saving the remainder of the Highway. The first step in the process was listing the highway in the National Register of Historic Places on December 12, 1983, with the document “Columbia River Highway Historic District—Nomination of the Old Columbia River Highway in the Columbia River Gorge to the National Register of Historic Places” by Dwight Smith, Oregon Department of Transportation. See Appendix 1 for excerpts from this document.

Current Conditions

Two sections of the HCRH have remained open to motor vehicle traffic as “scenic loops” and rural collectors—from Troutdale to Warrendale and from Mosier to The Dalles. Between Warrendale and Mosier there are three sections of the HCRH State Trail (open for hiking and biking) that have been completed:

1. Moffett Creek to Cascade Locks
2. Starvation Creek to Viento, and
3. Hood River to Mosier.

The HCRH State Trail projects are described in the “Progress” section of this document.

From west to east, these sections still remain to be restored:

1. Warrendale to Moffett Creek
2. Wyeth to Starvation Creek
3. Viento to Mitchell Point
4. Mitchell Point
5. Mitchell Point to Hood River

The sections of the HCRH within Cascade Locks and Hood River have remained

open to motor vehicle traffic, but enhancements are proposed, as described in the Programmatic Agreements.

Related Plans

Information from the 1996 Master Plan and the 1987 Study of the Highway has been incorporated into many of the documents prepared for the Columbia River Gorge National Scenic Area *Management Plan* (CRGNSA Management Plan), including the Recreation Assessment, Potential Recreation Site Descriptions, Interpretive Plan, and Trails System. The *Management Plan* was developed to implement to Columbia River Gorge National Scenic Area Act (see excerpts in Appendix 4).

The CRGNSA *Management Plan* includes the Highway as a Key Viewing Area and a Scenic Travel Corridor. (See excerpts in Appendix 5) Key Viewing Areas are those portions of important public roads, parks, or other vantage points within the Scenic Area from which the public views Scenic Area landscapes. The CRGNSA *Management Plan* includes specific goals, objectives and policies designed to ensure that this highway, and others, are managed as scenic and recreational travel routes.

The Recreation Development Plan portion of the CRGNSA *Management Plan* includes restoration and development proposals for the Historic Columbia River Highway/Mosier Tunnels (No. 34, page III-21), and Ruthton Point Overlook (No. 35, page III-22) in the General Management Area. These proposals are included in an Appendix 5.

In the Special Management Area Goal 4 (page III-28) is “Provide for the restoration and connection of the remaining segments of the Historic Columbia River Highway in

keeping with its National Register status.” Policies include:

1. The corridor of the Historic Columbia River Highway should be managed in cooperation with the State of Oregon as a historic visitor attraction.
2. Intact and usable highway segments should be connected with recreation trails to create a continuous route through the Columbia River Gorge that links local, state, and federal recreation and historic sites.
3. The recommendations identified in “A Study of the Historic Columbia River Highway” (1987) should be followed for restoration and connection projects.

SMA development proposal 36 incorporates these policies (page III-34, Appendix 5).

The Oregon Parks and Recreation Department’s “Columbia Gorge Management Unit Master Plan – 1994” provides information on resources and constraints in the State Parks in the Gorge, many of which are included in the HCRH Historic District or are adjacent to the HCRH. This document also includes development proposals within the parks, including HCRH State Trail improvements at Starvation Creek (completed) and Viento. However, this document preceded the opening of the first HCRH State Trail sections, so the State Trail is not addressed as a separate facility.

Further documentation is included in the Oregon Scenic Byway Corridor CRGNSA *Management Plan* and the National Scenic Byway Corridor CRGNSA *Management Plan* Portions of which have been incorporated into this Revised Master Plan, which reference this document. (See excerpts in Appendix 6).

Historic Columbia River Highway Advisory Committee

The Oregon Legislature created the Historic Columbia River Highway Advisory Committee (HCRH AC) in 1987. The HCRH AC reviews and makes recommendations to the Oregon Department of Transportation (ODOT) and the Oregon Parks and Recreation Department (OPRD). Membership on the committee includes representatives from those two agencies plus representatives from the State Historic Preservation Office and Travel Oregon. Private members include three representatives appointed by the Governor (one each from Multnomah, Hood River and Wasco counties) and one appointed by each county. These ten members meet at least four times a year to discuss issues and projects proposed along the HCRH. A list of current and previous members and the bylaws for the Advisory Committee are included in Appendix 22. Minutes of HCRH AC meetings are available at <http://www.oregon.gov/ODOT/HWY/HCRH/>.

Partnering

Projects that have been developed along the HCRH are the result of unique inter-agency cooperation. Different agencies provide the leadership for individual projects, while the other agencies assist in the planning.

For example, the Tanner Creek to Eagle Creek Connection Project was developed by ODOT. A Project Advisory Committee included representatives of the Columbia River Gorge Commission, the USDA Forest Service—CRGNSA, the Oregon Parks and Recreation Department, the Bonneville Power Administration, the Friends of the Columbia River Gorge and the HCRH AC. Another active partner is the Western Federal Lands Highway Division of the

Federal Highway Administration, the lead for several Forest Highway funded projects.

All of these agencies have worked together to find funding for potential projects. This unique partnership is reflected in the Framework Memorandum of Understanding (Appendix 7), the HCRH Connection Project Construction and Maintenance Memorandum of Agreement (Appendix 8) and the Hood River to Mosier Memorandum of Agreement (Appendix 9).

The HCRH Restoration Partnership has been recognized with a National Trust for

Historic Preservation Honor Award in 2002. The partners receiving the award included:

- Oregon Department of Transportation
- Historic Columbia River Highway Advisory Committee
- Oregon Parks and Recreation Department
- USDA Forest Service—Columbia River Gorge National Scenic Area
- Western Federal Lands Highway Division, Federal Highway Administration
- Friends of the Columbia Gorge.



Figure 7—View from the Past—Crown Point, Vista House and the HCRH