

Pasco-Kennewick Bridge
Spanning the Columbia River
Pasco
Franklin and Benton Counties
Washington

HAER No. WA-8

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WASH,
11-PASC,
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PHOTOGRAPHS

WRITTEN HISTORIC AND DESCRIPTIVE DATA

Historic American Engineering Record
National Park Service
Department of the Interior
Washington, D.C. 20240

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HISTORIC AMERICAN ENGINEERING RECORD

PASCO-KENNEWICK BRIDGE

Location: Pasco-Kennewick Bridge
Franklin & Benton Counties

Date of Construction 1922
Rehabilitated 1928
Sidewalk addition 1933
Highway upstream addition 1954

Present Owner: Franklin & Benton Counties

Present Use: Vehicular & pedestrian bridge

Significance: First of three cantilever
structures built across the
Columbia in 1920's - representative
of long span truss bridges.

Historian Lisa Soderberg, October 1980

The Pasco-Kennewick Bridge was constructed in 1922 to replace an outmoded ferry system which in a single trip transported a maximum of six cars across the Columbia River. Needless to say, the bridge facilitated the flow of automobile traffic, firmly linking Pasco and Kennewick, and transforming the adage "Twin Cities" into a reality. Within a broader perspective, the bridge had a direct impact on the social and economic development of the region, and of the entire state.

The Pasco-Kennewick Bridge was built by the Union Bridge Company which constructed a large number of bridges throughout Washington. It is a steel cantilever truss; and like two other Columbia River bridges, the Longview Bridge and the Bridge of the Gods, it is significant as a representative of long span truss bridges built during the first third of the century.

One thousand, one hundred and fifteen tons of steel were used to construct the 3300 foot structure. The span type and length from the Pasco side to the Kennewick side are as follows:

Span No.	Length	Type
1	40' - 0"	Reinforced concrete T-beam, rigid frame
2	100' - 0"	Steel plate girder, simple span
3	140' - 6"	Steel deck truss, simple span
4	252' - 0"	Steel through truss, simple span
5	234' - 0"	Steel petit through truss, anchor span
6	432' - 0"	Steel through truss, cantilever and suspended span (180' - 0" long)
7	234' - 0"	Steel petit through truss, anchor span
8	252' - 0"	Steel through truss, simple span
9	144' - 6"	Steel deck truss, simple span
10	144' - 6"	Steel deck truss, simple span
11	144' - 6"	Steel deck truss, simple span
12	108' - 6"	Steel deck truss, simple span
13	100' - 0"	Steel plate girder, simple span
14	100' - 0"	Steel plate girder, simple span

Only steel truss spans number 4, 5, 6, 7, 8 were constructed in 1922. Originally, the approach spans were timber trestles.

Although the original plans specified steel stringers and a concrete deck, a timber floor system was installed in 1922. In 1928 a flood washed out the timber trestle on the Kennewick side, which was replaced by a permanent deck truss approach span. Part of the timber approach span on the Pasco side was also replaced at this time. A sidewalk was added to the bridge in 1933 when it became part of the State Highway System. The State purchased the privately-owned bridge in 1931 for \$600,000. In 1936-37 the timber trestles at the ends of the bridge

were replaced with plate girder and reinforced concrete spans, and the timber floor was replaced with the present steel stringer and concrete deck. When the dikes were constructed along the river, one reinforced concrete span and one plate girder span were removed from the south end, and the approaches were raised. After the completion of the new state highway bridge upstream in 1954, the Pasco-Kennewick Bridge was transferred to the Franklin and Benton County Road system.²

The undulating form of the steel cantilever structure reflects the structural design advise of J.A.L. Waddell, a prolific writer and one of the leading bridge engineers at the beginning of this century. In his 1916 edition of Bridge Engineering, J.A.L. Waddell recommends: "In cantilever arms, it is better and more economical to use inclined posts as well as vertical ones over the piers, so that various loads will be carried more directly to the masonry....For both aesthetic and constructive reasons it is better to adopt a single vertical post over each main pier than to use either two posts close together or to divide the load between two piers."³ Throughout, Waddell stressed the importance of simplicity.

The completion of the bridge was a cause for celebration. The significance of the bridge is partly reflected in the beliefs and expectations of local and state residents who perceived the dedication of the bridge as a "history-making" event, bringing together people from across the state; a gala affair that included speeches, car caravans, picnics, street dancing, and carnivals.

Residents from both Pasco and Kennewick perceived the immediate impact of the bridge on the social and economic solidarity of the area. In the Kennewick-Courier Reporter of October 19, 1922, it was stated: "Although Pasco and Kennewick have grown up side by side on the banks of the Columbia; although their corporate limits have met in mid-stream; although they have been close together in distance, they have (not yet) been close together in the lives of the people....The day the bridge was opened to traffic, a new era dawned for each community. Pasco awoke in possession of thousands of acres of fields and orchards and Kennewick annexed a railroad payroll."

The completion of the cantilever truss across the Columbia did far more than bridge and merge the lives of two communities. It was seen as an integral part of the economic development of the State; and in fact, probably could not have been built unless it was perceived as contributing to the well-being and growth of the entire state. Because Franklin County had built a bridge across the Snake River, it could not bear the taxation burden of another bridge. Consequently, the possibility of bridging the Columbia by means of a joint bond issue by Benton

and Franklin Counties was out of the question.⁵ It was prominent businessmen and farmers of Walla Walla who conceived the idea that the bridge might be built by means of public subscription to stock. Although it was a time of economic struggle, in less than 18 months 1408 "public spirited citizens" from 17 communities in Washington and Idaho raised \$49,000 to finance the bridge through the formation of the Benton-Franklin Intercounty Bridge Co., with the belief that its construction was absolutely essential to the economic development of the state.⁶ In an article in the Seattle Times, it was stated that the public subscription effort was the "greatest community undertaking in the history of the Northwest."⁷ "So far as the Courier-Reporter knows no other bridge comparable in size has been built entirely by popular subscription without a bond being issued or cent of tax levied upon the general public."⁸ The building of "the magnificent new steel bridge across the Columbia," was the "first undertaking in which the extreme east and west sides of the state cooperated to the fullest extent."⁹ It was "material for a new page in Washington's history,"¹⁰ claimed the Oregonian.

Residents from the city of Seattle also financed a portion of the bridge. In an article on October 22, 1922, The Seattle Times quoted Frank Waterhouse, President of the Chamber of Commerce: "Seattle today has awakened to the importance of state development as never before in her history. She realizes that what helps the state helps Seattle and that she will grow only as the state of Washington and the entire Northwest grows." On the editorial page of the Seattle-Post Intelligencer on October 23, 1922, the Pasco-Kennewick Bridge was pictured as changing the "course of empire," linking the State Inland Empire Highway to Seattle and Western Washington.

The Inland Empire Highway also became part of the Yellowstone Trail, one of the first transcontinental automobile routes, a "good road from Plymouth Rock to Puget Sound." At the dedication, Mr. H. O. Cooley, manager of the Yellowstone Trail, hailed the bridge as the "connecting link of the Yellowstone Trail." A map of the trail dated May, 1916, indicates that the original Yellowstone Trail extended southward from Spokane to Walla Walla through Pasco and Kennewick. It was at a later date that another arm of the trail extended due west from Spokane. In the first annual edition of the American Automobile Association 1920 Highways Green Book, the Yellowstone Trail was listed as one of the "organized highways of National importance." In the Automobile Blue Book of 1920, tourists travelling along the Inland Empire Highway south from Spokane were instructed to take the ferry across the Columbia River at Pasco at \$1.00 charge. However, in 1924, this "standard touring guide of America" informed tourists travelling along the identical

route that "following the general course of the railroad through farming and sagebrush country to Pasco, the route crosses the Columbia River on a fine steel bridge to Kennewick."

The Pasco-Kennewick Bridge is important as a major crossing in the early national transcontinental highway system. It was the first of three cantilever structures to be built across the Columbia River during the 20's, marking the beginning of a proliferation of major bridge construction in this new transportation era.

END NOTES

1. Arvid Grant and Associates. Pasco-Kennewick Bridge Condition Survey and Rating Report. Pasco and Kennewick: August, 1967, p. 2.
2. Ibid, p. 3,4.
3. J.A.L. Waddell, Bridge Engineering. New York: John Wiley and Sons, Inc., 1916, p. 573.
4. Kennewick Courier-Reporter, October 22, 1922.
5. Pasco-Herald, Vol. 20, October 22, 1922.
6. Ibid.
7. Seattle Times, October 22, 1922.
8. Kennewick Courier-Reporter, October 22, 1922.
9. Seattle Times, October 22, 1922.
10. Oregonian, October 19, 1922.

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