

America's new wonder: a record-breaking bridge

October 17 2010, by Steve Friess



Tourists stand beside the Hoover Dam as they view the newly completed by-pass bridge which spans the Colorado River. The Mike O'Callaghan-Pat Tillman Memorial Bridge, which opened this month and connects the US states of Arizona and Nevada, spans the vast chasm 890 feet above the Colorado River that is controlled by the dam

America's greatest technological achievement, the Hoover Dam, now has a soaring companion piece, a massive looming bridge held up by the longest arch in the Western Hemisphere.

The Mike O'Callaghan-Pat Tillman Memorial Bridge, which opened this month and connects the U.S. states of Arizona and Nevada, spans the vast chasm 890 feet above the <u>Colorado River</u> that is controlled by the dam.



The striking 1,900-foot-long structure, which reroutes traffic off of the two-lane road atop the dam, will improve traffic in the region and help protect the dam from terrorist threats, officials said.

It is the seventh highest bridge in the world, behind four in China, one in Papua New Guinea and one in the US state of Colorado.

"The <u>Hoover Dam</u> is the greatest civil engineering achievement in America's history," said bypass bridge project manager Dave Zanatell with the Federal Highway Administration.

"Our goal was not to outdo or outshine it. Our goal was to, in a respectful way, do something that would be great for our generation and that would stand besides Hoover Dam in a respectful and quality way that would become a part of Hoover's legacy."

The 240 million dollar bridge was built in five years by 1,200 laborers and 300 engineers.



Native American children from the Red Hand Dance Troupe, perform on the newly opened Mike O'Callaghan-Pat Tillman Memorial Bridge which spans the Colorado River, beside the Hoover Dam. The bridge, which opened this month and connects the US states of Arizona and Nevada, spans the vast chasm 890 feet above the Colorado River that is controlled by the dam



It could not have arrived at a better moment for a nation and region whose psyche has been pummeled by a prolonged, devastating recession.

Just as the Hoover Dam was built in the heart of the <u>Great Depression</u> and was seen as an example of the nation's can-do spirit, some hope this project can provide some uplift.

The dam and bridge are "two engineering wonders constructed at times when our country was looking at itself and wondering what the future held," said Colleen Dwyer of the Bureau of Reclamation, which manages the dam.

"We're looking at what can be done even at these worst of times to make these wonderful structures come to be, to create something new and different which enables America to keep moving ahead. That's the parallel."

The bridge's dimensions are staggering: at 1,050 feet, its support arch is the longest arch in the Western Hemisphere, holding up a roadway that leans on 300-foot-long concrete pillars, some of the tallest in the world.

It contains 16 million pounds of steel, 30,000 cubic yards of concrete and two million feet of cable.

The idea of the bridge originated in the 1960s because the top of the Hoover Dam has been a narrow two-lane road that is the fastest route from Arizona to Las Vegas and then the Pacific Northwest and Canada.

Access to the dam from each direction is a treacherously winding route, but massive semi-trucks and passenger vehicles shared and navigated it for decades.



During the day, when thousands of tourists flock to the dam from Las Vegas, about 30 miles away, the interaction between traffic and pedestrians has been resulted in three times as many accidents as on a normal road, Zanatell said.

After the Sept. 11, 2001 terrorist attacks, the federal government feared a terrorist with a truck bomb could attack the dam, potentially flooding the region and disrupting water and power supplies to several states.

Semi-trucks were banned from bridge, forced to take route to Las Vegas that is more than 40 miles longer.

In addition to driving on it, tourists will be able to park in a designated lot on the Nevada side and climb stairs to walk the <u>bridge</u>, which has a sidewalk on the side facing the dam.

The retaining wall is 54 inches high, so pedestrians can snap photos from a spectacular vantage point.

"It makes me feel good as an American," said Jerry Couden, a residential general contractor from Milford, Connecticut., who, like millions of Vegas tourists each year, made the 30 miles drive southeast.

"Look what we did then (building the dam) and now look at what this is. It's a tremendous feat. It is cool to see."

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Citation: America's new wonder: a record-breaking bridge (2010, October 17) retrieved 7 June 2023 from <u>https://phys.org/news/2010-10-america-record-breaking-bridge.html</u>

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