



The Idaho Transportation Department is planning to construct a new bridge over the North Fork of the Payette River on SH-55 in Valley County. The existing bridge, known as the Rainbow Bridge, has served Idaho travelers for nearly 100 years.

Why is ITD recommending the removal of the existing Rainbow Bridge?

Today the bridge is deteriorating to the point where ITD can no longer maintain it to carry traffic or pedestrians over the long term. ITD has few choices. The department recognizes the history and significance of the Rainbow Bridge. As a department we have approached the decision about what to do with the existing bridge with complete transparency and professional evaluation. The recommendation to remove the existing bridge has been made with due diligence to ensure the decision is in the best interest of Idahoans.

In 2024, ITD thoroughly evaluated the condition of the existing Rainbow Bridge. The evaluation showed:

- ITD made extensive repairs of the bridge in 2006 using state-of-the-art technology. Twenty years later the repairs made to the bridge have deteriorated to a point that they cannot be fixed.
- Deterioration is extensive and will continue at an increasing rate.
- The level of corrosive elements in the concrete and rebar is significant and widespread.
- ITD cannot preserve the existing historic concrete as-is. Once concrete is saturated with chlorides, significant deterioration will continue.
- In 2025 ITD made minor repairs to the Rainbow Bridge to keep it operational without load restrictions until the new bridge is built in 2028. This work will not extend the bridge service life.

The evaluation concluded that the cost to keep the existing bridge, which has already undergone substantial alterations since its original construction, as a monument could range from \$20 million to \$50 million. Even at this cost, the work required would have significant impacts to the historic nature of the bridge. Additional inspection and maintenance costs would be required beyond this initial investment.

Why is ITD building a new Rainbow Bridge?

ITD is designing and constructing a new Rainbow Bridge. The new bridge will be built next to the location of the existing Rainbow Bridge. The new bridge will address:

- **Increased traffic volumes:** Average daily traffic (ADT) volumes on SH-55 have increased nearly 10 times since the 1930s. Four years after the bridge opened, 465 vehicles used the bridge each day. By 2025, that number had reached 4,189 vehicles per day. Average daily traffic is expected to reach 5,400 by 2039. During peak travel days in July, average daily traffic more than doubles.
- **Heavier truck loads:** The Rainbow Bridge was designed in 1933 for trucks weighing 30,000 pounds with 2 axles. Today's (2026), highway standards allow for trucks up to 105,000 pounds. This represents a 250 percent increase in truck weight. *



- **Longer commercial and recreational vehicles:** In 1933, the typical commercial truck length was 20 feet. Today (2026), the average commercial truck length is as long as 95 feet without a permit and 115 feet with a permit. *
- **Substandard geometry:** Drivers must significantly reduce speeds or wait on either end of the bridge due to tight curves, narrow lanes and limited sight distance.
- **Inability of ongoing maintenance to extend the bridge's lifespan:**
 - ✓ ITD completed an extensive rehabilitation of the bridge in 2006. The rehabilitation methods were state-of-the art. Twenty years later, this rehabilitation is no longer effective.
 - ✓ ITD repaired the Rainbow Bridge in 2025 to keep it operational without load restrictions until the new bridge is built in 2028. This work did not extend the bridge service life.

Designing for the future

The new Rainbow Bridge will meet current design and safety standards. It will provide adequate lane and shoulder widths for today's traffic loads. The new design will address tight curves on both sides of the bridge and improve sight distances for traffic crossing the bridge.

ITD believes the 1933 Rainbow Bridge can only be replaced with an exceptional piece that honors its location and will stand the test of time. When complete, the new bridge is expected to be one of Idaho's signature bridges. Design plans and renderings for the new bridge are underway and will be presented in the spring of 2026.

