

**Geotechnical
/ Structures****MAY 2026**

Project Title: Center for the Aging Infrastructure: Steel Bridge Research, Inspection, Training and Education Engineering Center - SBRITE (Continuation) (TPF-5(486))

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Task Manager:

Mario Jaquiz Vazquez
Transportation Engineer (Civil)
Mario.Jaquiz@dot.ca.gov

DRISI Division Chief:

Prakash Sah, PE
Prakash.Sah@dot.ca.gov



DRISI provides solutions and knowledge that improves California's transportation system.

Center for the Aging Infrastructure: Steel Bridge Research, Inspection, Training and Education Engineering Center - SBRITE (Continuation) (TPF-5(486))

This research project plans to invest on the training of the new generation of bridge engineers and inspectors who are properly educated to be effective stewards of the existing aging steel bridge inventory.

WHAT IS THE NEED?

As infrastructure ages, engineers who originally designed and understood these structures, such as those from the Interstate era, retired. This situation has led to a lack of professionals trained to maintain these critical structures. Thus, the need of engineers skilled in both designing future structures and maintaining existing ones.

Maintaining the existing steel bridge inventory requires expertise in areas such as deterioration, fatigue, fracture, corrosion, repair/retrofit, coatings, materials, NDE, riveting, welding, and fabrication. By investing in the continuation of SPR-5(281) the Steel Bridge Research, Inspection, Training, and Education Engineering Center (S-BRITE Engineering Center) focused on existing steel highway bridges these solutions. Departments of Transportation (DOTs) can ensure that the expertise needed to maintain and preserve the nation's steel bridge inventory is available, ultimately enhancing the safety and longevity of these critical infrastructure assets.

WHAT ARE WE DOING?

The plan is to aid the continuation of SPR-5(281) the Steel Bridge Research, Inspection, Training, and Education Engineering Center (S-BRITE Engineering Center) focused on existing steel highway bridges.

The California Department of Transportation (Caltrans) will pay for a Tier 2 commitment a \$100,000 for 2 years, \$50000 for

fiscal year 24/25 and \$50000 for fiscal year 25/26. This money provides support for the administration and policy development for center operations and strategic plan as well as for course development, traditional research and the gallery development and maintenance.

Tier 2 specific deliverables will include 1 training course at the stakeholder's facility for up to 50 people as well as 1 training course for up to 5 people including travel to Purdue University for specialized training at the bridge gallery or attending short courses. The five can attend the same training or each can attend training for up to two different topics. It also includes 20 hours of specific assistance through the Distributed Expertise Network.

WHAT IS OUR GOAL?

The goal of this project is to invest in the continuation of SPR-5(281) the Steel Bridge Research, Inspection, Training, and Education Engineering Center (S-BRITE Engineering Center) focused on existing steel highway bridges these solutions. DOTs can ensure that the expertise needed to maintain and preserve the nation's steel bridge inventory is available, ultimately enhancing the safety and longevity of these critical infrastructure assets. Furthermore, the product or goals of the research is to create the next generation of bridge engineers and inspectors who are properly educated to be effective stewards of the existing aging steel bridge inventory.

WHAT IS THE BENEFIT?

Caltrans will benefit from having a team of well-trained bridge engineers, which will enhance the quality and efficiency of structural projects. This investment in training will also serve to inspire and encourage the next generation of engineers.

WHAT IS THE PROGRESS TO DATE?

Collaboration with the customer and his team of bridge engineers to attend the training sessions provided and webinars. Continued the efforts to support knowledge

sharing, technical understanding, and effective use of the platform among participating organizations. In addition, the new S-BRITE website was further updated to improve functionality, accessibility, and user experience. Coordination was also conducted with several partner states to obtain additional bridge specimens and related data for inclusion in S-BRITE, helping to expand the system's database and strengthen the overall value of the program for future research and analysis.