

**ACEC/Caltrans DES
Structures Liaison Committee
2024 ANNUAL REPORT**

I. Introduction

The ACEC / Caltrans Division of Engineering Services (DES) Structures Liaison Committee (the Committee) was formed in 1992 with the primary purpose of maintaining a professional working relationship between Caltrans DES and ACEC member firms that perform engineering services for transportation structure projects. The Committee Charter requires that an Annual Report on Committee activities be prepared each calendar year.

II. Committee Meeting Dates

During the 2024 calendar year, the Committee met on the following dates:

- February 2, 2024
- May 3, 2024
- August 2, 2024
- November 1, 2024

This year, the Committee continued to utilize a hybrid meeting format, allowing for in-person attendance at the Farmers Market Building in Sacramento and virtual attendance via Microsoft Teams. This approach continued to garner strong participation and engagement across the State. Meeting minutes were prepared by the Committee Secretary, reviewed by DES for accuracy and ADA compliance, and posted to the Caltrans OSFP and SLA websites. In addition to quarterly meetings, the core committee held pre-meeting calls to coordinate agenda topics and ensure appropriate Caltrans and consultant participation.

III. Committee Members

Caltrans DES staff were consistently represented throughout the year. Garrett Dekker served as ACEC Committee Co-Chair, Miguel Carbuccia served as Committee Secretary, and Lance Schrey continued to serve as the Caltrans liaison. Notable Caltrans participants included Jim Foster, Rich Foley, Don Nguyen-Tan, Chris Traina, Sid Pedaballi, Hamid Sadraie, Robert Peterson, Andy Chou, and John Lammers. Several guest speakers also attended to present specific technical topics.

The seven regular members from ACEC were:

- Mark Reno, Consor (Districts 1-3, 9 & 10)
- Jack Abcarius, NV5 (District 11)

**ACEC/Caltrans DES
Structures Liaison Committee
2024 ANNUAL REPORT**

- Garrett Dekker, Moffatt & Nichol (District 4)
- Miguel Carbuccia, HNTB (acting for Michael Van Duyn, Districts 7, 8, 12)
- Bobby Zermeno, Cornerstone Structural Engineering (Districts 5 & 6)
- Frank Martin, Psomas (CM&I, Districts 1-6, 9-10)
- Jon Rohrer, HDR (CM&I, Districts 7-8, 11-12)

IV. Major Topics

A standing agenda with recurring topics was utilized and updated throughout the year. Modifications and additions to the standing agenda, including specific technical topics for each meeting, were made during the Committee's pre-meeting conference calls. The standing agenda items included the following:

A. DES Updates

Caltrans provided regular updates regarding organizational changes, Capital Outlay Support (COS) workload, and key developments. Rich Foley emphasized the Committee's goal to enhance interaction and inclusivity within the design community. Jim Foster was appointed Deputy Division Chief of Structures and Engineering Services, and John Lammers stepped in as Deputy Division Chief of Structure Construction. Caltrans continued to emphasize its long-term goal to transition to fully digital contract delivery within five years.

B. Technical: Structure Technical Policy (STP), Memo to Designers, Technical Research

Throughout 2024, Caltrans gave updates on technical policies, design guidance, and supporting documents. The Committee tracked revisions to multiple Structure Technical Policies (STPs), many of which addressed design clarity, constructability, and engineering practices. Several outdated memos were retired or consolidated, and Caltrans continued to roll out California amendments to the AASHTO LRFD specifications. Notably, STP 2.6, governing hydraulic design for structures over waterways, remained a recurring discussion item, with ACEC providing feedback on design criteria. A related BDM is under development to support its implementation.

Bridge Design Memos (BDMs) were also updated, including memos regarding foundations, deck details, and load distribution practices. In parallel, Caltrans continued to reorganize manuals, including the deactivation of legacy Memos to Designers and incorporating the content into updated guidance documents. The OSFP Information and Procedures Guide was updated to include new guidance on the use of lightweight concrete in bridges, specifically as it relates to seismic design.

**ACEC/Caltrans DES
Structures Liaison Committee
2024 ANNUAL REPORT**

Chris Traina provided regular updates on Caltrans' technical research initiatives, highlighting an active year of project research and funding. Research priorities included advancing seismic performance, improving bridge inspection through AI and drone technologies, and evaluating new materials such as Grade 80 reinforcement and ultra-high-performance concrete (UHPC). Caltrans continued its collaborations with academic institutions like Iowa State University, Georgia Tech, and the University of Texas at Austin. The status of Seismic Design Criteria (SDC) 2.1 was announced throughout the year, with the goal of releasing SDC 2.1 by the end of the year.

C. Project Development Oversight / Contracting Opportunities

Caltrans provided quarterly updates on contracting opportunities through the DPAC Look-Ahead Report, with a growing trend in both the volume and value of consultant contracts. Major scopes included design, construction support, materials testing, and surveying and mapping, with contracts spread across all districts. The rollout of Progressive Design-Build (PDB) pilot projects remained a focus, including the Coronado Bridge and the upcoming I-5 Managed Lanes project. Caltrans also reported growing concern over a decline in bid participation and encouraged feedback from the consultant community to better understand and address potential barriers.

D. Local Assistance

Robert Peterson and Andy Chou provided updates on behalf of Caltrans Local Assistance. Topics included ongoing updates related to the Highway Bridge Program (HBP), emphasizing the importance of timely project delivery amid funding availability through the Infrastructure Investment and Jobs Act (IIJA). With the federal fiscal year 2024–2025 marking the fourth year of the five-year IIJA authorization, Local Assistance urged agencies to obligate funds quickly to avoid delays or lapses.

Staffing updates within the HBP team were shared, including the appointment of Karen Nguyen as the new Local Highway Bridge Program Manager. Caltrans shared updates on local agency guidance documents, including the revised Bridge Preventive Maintenance Program (BPMP) criteria and the 2024 Caltrans Construction Standards. An implementation memo is forthcoming to guide the use of the 2024 standards on local agency projects.

E. ACEC Statewide Committee Report

Garrett Dekker provided regular updates from the Statewide ACEC Committee. A major development in 2024 was the rollout of a new cost proposal spreadsheet by DPAC, intended to streamline contract negotiations. Garrett also shared the Committee's discussions regarding “fair and reasonable” wage determinations, including proposals to use in-house cost data as a basis for evaluating consultant rates. Other updates included the anticipated impacts of legislation affecting prevailing wage requirements and the finalization of full-service construction contract

**ACEC/Caltrans DES
Structures Liaison Committee
2024 ANNUAL REPORT**

templates for use across Caltrans districts. Caltrans continued to improve consultant access to its digital network, including the rollout of guidance for using iOS devices and adhering to security protocols.

F. Construction Management and Inspection Updates

The Committee continued to address CM&I staffing and training. A recurring topic was the classification and use of consultant structure representatives, including questions about appropriate authority, scope of responsibility, and liability. The Committee also received updates on revisions to the Caltrans Trenching and Shoring Manual, which was updated to align with State practices. The Committee also received updates about the 2024 Winter Training, which focused on alternative delivery, precast concrete, soil nails, ground anchors, and accelerated bridge construction.

G. Sub-Committee Updates

The ABC Sub-Committee, led by Garrett Dekker, Habib Hotaki, and Sebastian Varela, reported on research partnerships, training initiatives, and field implementation of UHPC connections and precast components. Highlights included the ribbon cutting for Kings River Bridge in District 6 and completion of the Panther and Hunter Creek bridges in District 1. The ABC Sub-Committee also held an in-person ABC Workshop in March, discussed further in Section V of this Report.

The Alternative Project Delivery Methods Sub-Committee, led by Mark Reno and Jason Chou, continued to track PDB implementation. The Sub-Committee intends to host a PDB lessons learned workshop in 2025, which would include presentations from out-of-State professionals.

The BIM Sub-Committee, co-led by Doug Dunrud and Bobby Zermeno with assistance from Mina Pezeshpour, continued to support Caltrans' initiative to adopt BIM digital project delivery. In 2024, Caltrans distributed a BIM Implementation Survey to consultants to assess the current stats of BIM adoption and practices in industry. The inaugural 2024 BIM for Infrastructure Summit, hosted by Caltrans, was a two-day event held in March to enhance industry BIM awareness. Caltrans reported that task teams are being formed with an open invitation to consultant participation. Caltrans summarized a new AAHSTO publication, TPF-5(372), that discusses BIM use for bridges.

The Technical Sub-Committee continued to serve as a resource for clarifying Caltrans design policies and manuals. Topics in 2024 included bicycle safety concerns at inboard barriers, the definition and application of the Maximum Credible Earthquake, and technical clarifications related to the Trenching and Shoring Manual and the Prestress Manual.

STP 2.6 was a recurring focus of the Committee discussions. Caltrans reassessed how bridge abutments supported on piles are designed for scour and considered a risk-based approach in

**ACEC/Caltrans DES
Structures Liaison Committee
2024 ANNUAL REPORT**

alignment with FHWA guidance. New policies will incorporate a formula that factors in Average Daily Traffic (ADT) and detour length to quantify risk. Drafts of the updated STP 2.6 were circulated to ACEC for review and feedback. These reviews resulted in a series of follow-up discussions to resolve outstanding items. It was reported that STP 2.6 updates would also be made consistent with California Amendments to AASHTO LRFD.

V. Significant Accomplishments

In March 2024, the Committee hosted a well-received ABC Workshop that brought together Caltrans engineers, consultants, contractors, and academics to explore best practices in ABC methodologies. The workshop featured presentations on precast bridge elements, seismic performance, UHPC connections, and case studies from recent Caltrans and local agency projects. ACEC members actively participated in panel discussions, providing real insight and helping shape guidance for future ABC implementation across the State. In total, the Workshop was attended by 128 professionals.

The Caltrans Division of Engineering Services (DES) celebrated its 100th anniversary in 2024, with an event that featured seven kiosks representing the different DES divisions along with keynote speakers Rick Land, Will Kempton, Rich Foley, Vassil Simeonov, and Dave Kiem. The event was well attended by industry, and attendees had the opportunity to inspect drill equipment and bridge accelerometers. The event also featured video vignettes created by different DES branches and consultants.

In November 2024, the Committee facilitated an industry review of a new section for the Caltrans OSFP Information and Procedures Guide concerning the use of lightweight concrete in structures within Caltrans right of way. This new section introduced new restrictions on the use of lightweight concrete and established stricter implementation requirements. A review panel of seven representatives from ACEC consultant firms was assembled to evaluate the policy and provide consolidated feedback. All comments were screened and organized before submission to Caltrans for consideration. This effort highlighted the Committee's ongoing role in providing collaborative dialogue between Caltrans and the consultant community to implement technical guidance.

The development of STP 2.6 represented a major collaborative effort between Caltrans and ACEC throughout 2024. Focused on Hydraulic Design for Structures over Waterways, ACEC provided extensive feedback on draft policies, and facilitated numerous focus meetings with Caltrans. Caltrans acknowledged the complexity of the issue and worked with the Committee to refine the policy. This collaboration demonstrated the value of the Committee to help guide balanced, technically sound policy for the industry.

**ACEC/Caltrans DES
Structures Liaison Committee
2024 ANNUAL REPORT**

Caltrans provided invitations to Consultants and Local Agencies who provided interest in virtually attending Caltrans Education Committee's monthly presentations. Most presentations were attended by 20 – 40 consultants/local agencies.

Once again, the annual Winter Training session provided a valuable platform for Caltrans to exchange knowledge and share current construction practices with industry. The 2024 training focused on alternative delivery, prestressing, soil nails, ground anchors, and ABC. It garnered in-person participation from 116 attendees over six sites, including consultants and local agency representatives. The feedback from industry was overwhelmingly positive.

VI. Future Plans (for the Coming Year)

The Committee plans to continue with a hybrid in-person/virtual meeting format for 2025. The Committee will continue to work collaboratively on technical issues, project development oversight, and education. The following education/training events are anticipated in 2025:

- DES Education Committee Presentations
- SDC 2.1 Summary of Changes - Spring 2025
- 2nd Annual BIM Summit - Spring 2025
- Structures Construction Winter Training (Structure Foundations) - Spring 2025
- Alternative Delivery: Progressive Design Build Lessons Learned - Fall 2025

VII. Closing Statement

2024 was a positive year featuring multiple collaborative efforts between Caltrans DES and ACEC. The Committee's hybrid format fostered inclusivity and transparency, allowing more participation from individuals across the State. Technical discussions were robust, and ACEC played a positive role in shaping policy and supporting training. The Committee remains an important industry platform for advancing transportation infrastructure in California.

Prepared By:
Garrett Dekker, Committee Co-Chair