

Hospital Building Safety Board

Full Board Meeting
June 3 – 4, 2025



***** SPECIAL NOTICE *****

This meeting will be held in-person at the Department of Health Care Access and Information (HCAI) office in Los Angeles, as well as by teleconference.

Board members must attend this meeting in person. HCAI staff and members of the public may fully participate from their own locations.

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2020 West El Camino Avenue, Suite 800
Sacramento, CA 95833
hcai.ca.gov



Hospital Building Safety Board Full Board Meeting AGENDA

June 3, 2025
10:00 a.m. – 4:00 p.m.

June 4, 2025
9:00 a.m. – 3:00 p.m.
Please note early start time

The Board may not discuss or act on any matter raised during the public comment section that is not included on this agenda, except to place the matter on a future meeting agenda. (Government Code §§ 11125, 11125.7, subd. (a).)

Location:

[355 South Grand Avenue, Ste. 2000, Los Angeles, CA 90071](#)

[Day 1 Teams Meeting Access](#); Meeting ID: 219 592 278 097; Passcode: Ud3zd2Vu
Call in: (916) 535-0978; Phone Conference ID: 595 114 58#

[Day 2 Teams Meeting Access](#); Meeting ID: 298 841 422 261; Passcode: SA6WY646
Call in: (916) 535-0978; Phone Conference ID: 540 056 010#

- Item #1 Call to Order and Welcome
 Facilitator: Jim Malley, SE, Senior Principal, Degenkolb Engineers; Board Chair (or designee)
- Item #2 Roll Call and Meeting Advisories/Expectations
- Determination of Quorum
 - Conduct of Meeting
- Facilitator: Veronica M. Yuke, Manager, HCAI; Executive Director (or designee)*

- Item #3 Department of Health Care Access and Information (HCAI) Update
- Swearing-in Ceremony for new HBSB members:
 - Mikhail Fuks, Mechanical Engineer Representative
 - Kelly Martinez, Public Member Representative
 - Noella Tabladillo, Public Member Representative
 - Recognition of outgoing HBSB Members:
 - Louise Belair, Mechanical Engineer Representative
 - Michael Foulkes, Public Member Representative
 - HCAI Update
 - Discussion and public input
- Facilitator: Elizabeth Landsberg, Director, HCAI (or designee)*
- Item #4 Overview and approval of the December 11 – 12, 2024, Full Board draft Meeting Report/Minutes
- Discussion and public input
- Facilitator: Jim Malley (or designee)*
- Item #5 Ad hoc Board Procedures Committee
- Overview and approval of the December 11, 2024, draft Meeting Report/Minutes
 - Discussion and public input
- Facilitator: Gary Dunger, Executive Director, Design and Construction, Cedars-Sinai Health System; Committee Vice-Chair (or designee)*
- Item #6 Instrumentation Committee
- Overview and approval of the January 28, 2025, draft Meeting Report/Minutes
 - Discussion and public input
- Facilitator: Farzad Naeim, PhD, SE, Esq, NAE, President, Farzad Naeim, Inc.; Committee Chair (or designee)*
- Item #7 Energy Conservation and Management Committee
- Overview and approval of the April 2, 2025, draft Meeting Report/Minutes
 - Discussion and public input
- Facilitator: Cody Bartley, DPR Construction; Committee Chair (or designee)*

- Item #8 Structural and Nonstructural Regulations Committee
- Overview and approval of the March 12, 2025, draft Meeting Report/Minutes
 - Discussion and public input
- Facilitator: Jim Malley, Committee Chair (or designee)*
-
- Item #9 Codes and Processes Committee
- Overview and approval of the May 7, 2025, draft Meeting Report/Minutes
 - Discussion and public input
- Facilitator: Michael O'Connor, Principal, Nichols, Melburg & Rossetto; Committee Chair (or designee)*
-
- Item #10 Education and Outreach Committee
- Overview and approval of the following draft Meeting Reports/Minutes:
 - February 13, 2025
 - April 23, 2025
 - Discussion and creation of an ad-hoc committee to develop educational opportunities to advance utilization of structural health monitoring by hospitals using seismic instrumentation
 - Discussion and creation of an ad-hoc committee to develop a “Designing for Resilience” webinar on dealing with natural hazard events
 - Discussion and creation of an ad-hoc committee to develop a how-to guide on preapproved fabricated components and systems as a follow up to the June 2024 webinar
 - Discussion and public input
- Facilitator: Scott Mackey, AIA, NCARB, APEC, Design Manager, Hensel Phelps; Committee Chair (or designee)*
-
- Item #11 “Collaborative Inspection Approach to Field Inspections” (formerly “Inspect-to-Pass Approach to Field Inspections”) Webinar Development Subcommittee of the Education and Outreach Committee
- Overview and approval of the following draft Meeting Reports/Minutes:
 - February 27, 2025
 - March 27, 2025
 - April 24, 2025
 - Discussion and public input
- Facilitator: Michael L. Davis, CHI, Senior Consultant, DavisHBC, Inc; Subcommittee Chair (or designee)*

- Item #12 Office of Statewide Hospital Planning and Development (OSHPD) Update
- Workload and performance
 - Discussion and public input
- Facilitator: Chris Tokas, SE, F.SEAOC, CBO, Deputy Director, HCAI (or designee)*
- Item #13 Building Standards Unit Update
- Proposed [Functional Program Advisory Guide](#)
 - Discussion and public input
- Facilitator: Richard Tannahill, Architect, Deputy Division Chief, HCAI (or designee)*
- Item #14 Special Presentation: Kaiser Permanente Ontario Medical Center - Renewable Energy Microgrid System
- Discussion and public input
- Facilitators: Chris Tokas and Kaiser Permanente Representative/Speaker (or designees)*
- Item #15 Comments from the Public/Board Members on issues not on this agenda
The Board will receive comments from the Public/Board Members. Matters raised at this time may be taken under consideration for placement on a subsequent agenda.
- Facilitator: Jim Malley (or designee)*
- Item #16 Adjournment

Appointed Members: James O. Malley, SE, Senior Principal, Degenkolb Engineers;
Board Chair
Scott Mackey, AIA, NCARB, APEC, Healthcare Design
Consultant; Board Vice-Chair
Louise Belair, PE, LEED AP, Senior Vice President, WSP
Cody Bartley, DPR Construction
Janice Cheung, PE, CSP, Fire Marshal, Redwood City
Jennifer G. Cox, MHA, BSN, RN, PHN, CIC, System Director,
Epidemiology and Infection Prevention, UC Irvine Health
Michael L. Davis, CHI, Senior Consultant, DavisHBC, Inc.
Gary Dunger, Executive Director, Design and Construction,
Cedars-Sinai Health System
Teresa Endres, AIA, ACHA, EDAC, AAH, Senior Associate,
Medical Planning Director, Taylor Design
Michael Foulkes, Director, State and Local Government Affairs,
Apple Inc.

John Griffiths, PE, Electrical Engineer, CONTECH-CA
Martin B. Hudson, PhD, PE, GE, Principal Geotechnical
Engineer, Hudson Geotechnics, Inc.
Courtney B. Johnson, PG, CEG, Principal Geologist, Slate
Geotechnical Consultants
Farzad Naeim, PhD, SE, Esq, NAE, President, Farzad Naeim, Inc.
Carl Newth, PE, CBO, LEED BD+C, Building Official and
Director of Engineering Services, UC Los Angeles

Director-Appointed

Ex-Officio Members: David Bliss, MD, Faraday Microgrids
Bert Hurlbut, VP Construction, Stanford Healthcare, Retired
Michael O'Connor, Principal, Nichols, Melburg & Rossetto

Ex-Officio Members: Elizabeth Landsberg, HCAI Director
Daniel Berlant, State Fire Marshal
Vickie Sakamoto (Delegate)
Jeremy Lancaster, State Geologist
Jennifer Thornburg (Delegate)
Stoyan Bumbalov, Building Standards Commission,
Executive Director
Irina Brauzman (Delegate)
Kevin Day (Delegate)
Erica Pan, MD, MPH, FIDSA, FAAP, Department of Public
Health, Director
Nathaniel Gilmore (Delegate)
Chris Tokas, OSHPD Deputy Director

HBSB

Executive Director: Veronica M. Yuke

The Hospital Building Safety Board agenda and other notices
about meetings are posted online and can be found by searching for Hospital
Building Safety Board and meeting month at <https://hcai.ca.gov/public-meetings>.

For further information about this meeting, please contact Evett Torres or
Marcus Palmer at (916) 440-8300, HBSBSupportStaff@hcai.ca.gov, or send a
letter to The Department of Health Care Access and Information, 2020 West El
Camino Avenue, Sacramento, CA 95833.

The Board may take action under any agenda item.

Every effort will be made to address each agenda item as listed. However, the
agenda order is tentative and subject to change without prior notice. Items not listed
on the agenda will not be considered. The Board may take a 30- to 90-minute break
during the meeting. Members of the public are NOT required to identify themselves

or provide other information to attend or participate in this meeting. If Microsoft Teams requires a name, you may enter "Anonymous". You may also input fictitious information for other requested information if required to attend the meeting (e.g., anonymous@anonymous.com).

This meeting is accessible to persons with a disability. A person who needs a disability-related accommodation or modification in order to participate in the meeting may make a request by contacting Evett Torres or Marcus Palmer at HBSBSupportStaff@hcai.ca.gov or sending a written request to HBSB Staff at 2020 West El Camino Avenue, Sacramento, CA 95833. Providing your request at least seven (7) business days before the meeting will help ensure availability of the requested accommodation.

If you need help understanding or translating into another language, or if you need sign language services, please contact Evett Torres or Marcus Palmer at HBSBSupportStaff@hcai.ca.gov. Let us know at least seven days before the meeting so we can set up the services you need.

Spanish/ Español

Si necesita ayuda para entender esta agenda de la reunión, necesita que se traduzca en otro idioma, o necesita servicios en lenguaje de señas Evett Torres HBSBSupportStaff@hcai.ca.gov. Avísenos al menos siete días antes de la reunión a fin de que podamos programar los servicios que necesita.

Korean/ 한국어

이 회의 안건을 이해하는 데 도움이 필요하거나, 다른 언어로 번역이 필요하거나, 수화 서비스가 필요한 경우: Evett Torres HBSBSupportStaff@hcai.ca.gov. 필요한 서비스를 제공할 수 있도록 회의 개최 7일 전까지 알려주십시오.

Chinese Simplified/簡體中文

如果您在理解本会议议程方面需要帮助，需要将本会议议程翻译成其他语言，或需要手语服务 Evett Torres HBSBSupportStaff@hcai.ca.gov. 请至少在会议前七天通知我们，以便我们安排您所需的服务。

Tagalog/Tagalog

Kung kailangan mo ng tulong upang maunawaan ang adyenda ng pagpupulong na ito, kailangan itong isalin sa ibang wika, o kailangan ng mga serbisyo para sa sign language Evett Torres HBSBSupportStaff@hcai.ca.gov. Ipaalam sa amin nang hindi bababa sa pitong araw bago ang pagpupulong upang mai-set up namin ang kailangan mong mga serbisyo.

Vietnamese/Tiếng Việt

Nếu quý vị cần trợ giúp để hiểu chương trình nghị sự của cuộc họp này, như cần dịch sang ngôn ngữ khác hoặc cần dịch vụ ngôn ngữ ký hiệu Evett Torres HBSBSupportStaff@hcai.ca.gov. Vui lòng cho chúng tôi biết ít nhất bảy ngày trước cuộc họp để chúng tôi có thể bố trí các dịch vụ mà quý vị cần

Chinese 繁體中文

如果您在理解本會議議程方面需要幫助，需要將本會議議程翻譯成其他語言，或需要手語服務 Evett Torres HBSBSupportStaff@hcai.ca.gov. 至少在會議前七天通知我們，以便我們安排您所需的服務。

Los Angeles Office:

You may take public transportation via:

- The "B" or "D" Metro Lines to Pershing Square
- The "A" or "E" Metro Lines to Grand Avenue Arts/Bunker Hill
- The B Dash bus to Financial District (on Alameda St)
- The Commuter bus at Patsaouras Plaza (Stop# 3)

Public parking locations in the area:

- 330 S. Hope Street - Wells Fargo Center
 - On Site; \$4.75 for each 10 minutes/\$47.50 for 10 hours
- 465 S. Flower Street - Westin Bonaventure Garage
 - .12 Miles; \$20
- 530 S. Grand Avenue - Pac Mutual Building Garage
 - .15 Miles; \$25
- 601 W. 5th Street - Cal Edison Building
 - .18 Miles; \$18
- 625-631 S. Olive Street - Crown Plaza Garage
 - .23 Miles; \$10

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HCAI Update

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New Hospital Building Safety Board Members

Mechanical Engineer Representative:

Mikhail Fuks, Professional Engineer, Healthcare Facility Design Professional, Design-Build Professional, has 18 years of mechanical engineering experience with a focus in healthcare facilities. As the P2S Inc. Healthcare Group Leader, he manages a high-performance team of engineers and designers who specialize in large, complex, and phased acute and outpatient healthcare projects that have challenging design parameters, schedules, budgets and sustainability goals.

Mr. Fuks is well acquainted with working in mission-critical facilities that cannot be shut down and need to maintain patient care at all times. His experience has helped develop relationships with HCAI and other Authority Having Jurisdiction staff to address project issues early and engage in active dialogue for items that require interpretations.

Mr. Fuks earned a Bachelor of Science in Mechanical Engineering from California State University, Long Beach.

Public Member Representative:

Kelly Martinez, Registered Nurse, Master of Business Administration, Fellow of the American College of Healthcare Executives, Evidence-Based Design Accreditation and Certification, is co-founder of Hallsta, Inc., a project management firm that specializes in healthcare construction. A California Board Registered Nurse since 2007, and accredited by The Center for Health Design, Ms. Martinez has successfully integrated her clinical knowledge with healthcare construction, overseeing projects that include facility enhancements, seismic upgrades, minor and major remodels, and full-scale ground-up construction. In addition to healthcare construction, her expertise spans hospital operations, licensing, and regulatory compliance with meticulous attention to OSPHD compliance and California Building Codes.

Ms. Martinez served over two years as a consulting member of the Hospital Building Safety Board's Codes and Processes Committee and Education and Outreach Committee.

Ms. Martinez earned a Bachelor of Science in Nursing from Loma Linda University, and a Master of Business Administration from California State University, San Bernadino.

Public Member Representative:


Noella V. Tabladillo is Director of Government Relations and Community Benefits at Kaiser Permanente National Facilities Services (NFS). She has over 17 years of experience in project leadership on community and corporate projects, strategy planning and execution, and public policy development. Ms. Tabladillo is lead on the NFS “Building for Impact” community health initiative that focuses on improving community conditions to address the social factors that impact health and well-being. She also manages all regulatory requirements for Senate Bill (SB) 499, SB 90, and SB 1661 with 12 seismic replacement Kaiser Permanente hospitals in California with OSHPD.

Ms. Tabladillo earned a Bachelor of Arts in Political Science from San Jose State University.

Full Board

Draft Meeting Report/Minutes

December 11 - 12, 2024

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2020 West El Camino Avenue, Suite 800
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HOSPITAL BUILDING SAFETY BOARD Full Board Meeting

December 11, 2024

1:00 p.m. – 4:00 p.m.

December 12, 2024

9:00 a.m. – 3:00 p.m.

Location:

2020 West El Camino Avenue, Suite 900, Sacramento, CA 95833

Appointed Members Present

Louise Belair, Chair
Janice Cheung
Jennifer Cox
Michael Davis
Gary Dunger
Teresa Endres
Michael Foulkes
Martin Hudson
Courtney Johnson
Scott Mackey
Farzad Naeim
Carl Newth

HBSB Staff Present

Veronica Yuke, Executive Director
Marcus Palmer
Evelt Torres

Ex-Officio Members Present

Elizabeth Landsberg, HCAI Director
Kevin Day, Building Standards Commission
(Delegate)
Nathaniel Gilmore, Department of Public Health
(Delegate)
Jeremy Lancaster, State Geologist
Jennifer Thornburg (Delegate)
Chris Tokas, OSHPD Deputy Director

Director-Appointed Ex-Officio Members Present

David Bliss
Bert Hurlbut
Michael O'Connor

HCAI Staff Present

Scott Christman
Arash Altoontash
Richard Tannahill
Roy Lobo
Mia Marvelli
Andia Farzaneh

1 **1. Call to order and Welcome**

2 **Facilitator:** Louise Belair, PE, LEED AP, Senior Vice President, WSP; Board Chair

3 Louise Belair opened the meeting, welcoming everyone and outlining the day's agenda.
4 The meeting was officially called to order at 1:04 p.m., and she expressed anticipation
5 for the discussions ahead.
6

7 **2. Roll Call and Meeting Advisories/Expectations**

8 **Facilitator:** Veronica M. Yuke, Manager, HCAI; Executive Director

9 Veronica Yuke conducted the roll call, confirming the presence of a quorum.
10

11 **3. Department of Health Care Access and Information (HCAI) Update**

12 **Facilitator:** Elizabeth Landsberg, Director, HCAI

13 **Summary of Updates:**

- 14 • Elizabeth Landsberg provided an update on HCAI's legislative activities,
15 mentioning the governor's actions on seismic safety bills. She discussed the
16 signing of Assembly Bill 869 and the veto of Senate Bill 1432 and a Bill for
17 Providence facilities.
- 18 • Elizabeth Landsberg discussed the budget cuts, including a 7.95% reduction in
19 operating expenses and the elimination of 10,000 vacant positions.
- 20 • She covered the work of the Office of Health Care Affordability on primary care
21 benchmarks and cost growth targets, including the requirement for health plans
22 to achieve a 15% primary care spend rate by 2034.

23 **Discussions and Public Input:**

- 24 • None.
25

26 **4. Overview and approval of the August 15, 2024, Full Board draft Meeting**
27 **Report/Minutes**

28 **Facilitator:** Louise Belair

29 Louise Belair reviewed the key topics covered in the August 15, 2024, Full Board
30 meeting, including updates on HCAI activities and committee reports.
31
32

Discussions and Public Input:

- None.

Informational and Action Items:

• Informational:

Summary of the key topics covered, including:

- HCAI activities update.
- Updates on budget shortfalls, loan approvals, and legislative actions related to seismic standards.
- Nomination and approval of the Hospital Building Safety Board Chair and Vice-Chair.
- Approval of previous full board, committee and subcommittee meeting reports.
- OSHPD updates.

• Action:

- **Motion to Approve:** Michael Foulkes, to approve the August 15, 2024, Full Board meeting report.
 - Teresa Endres seconded the motion.
 - The report was unanimously approved.

5. Education and Outreach Committee

Facilitator: Scott Mackey, AIA, NCARB, APEC, Healthcare Design Consultant;
Committee Chair

Scott Mackey presented a comprehensive update on the activities and achievements of the Education and Outreach Committee for 2024. The August 1, 2024, and September 26, 2024, draft meeting reports emphasized the committee's efforts to improve stakeholder engagement, disseminate critical knowledge, and address key educational needs in healthcare design and compliance.

Discussions and Public Input:

• Published Guides:

- The committee successfully published two guides aimed at healthcare professionals:
 - "Design Guide for Planning and Preparing for Disasters," which provides practical steps for disaster readiness.

- " Design Guide for Working on Projects under OSHPD Jurisdiction – Tips from the Experts," a resource compiling best practices from industry leaders.
- These guides were distributed through various online platforms and physical events.
- **Webinars Conducted:**
 - Two major webinars were hosted:
 - A session on prefabricated systems, attended by over 200 participants, focused on simplifying compliance and inspection processes.
 - A workshop on integrated review processes, designed to streamline communication and efficiency between design teams and regulatory bodies.
 - Both webinars received overwhelmingly positive feedback, with attendees requesting follow-up sessions on specific technical aspects.
- **Certification Training:**
 - The Certification Training for Construction Administrative Proficiency (CAP) program was launched in 2024.
 - The program aims to certify administrative professionals in essential healthcare project management skills.
 - Initial feedback highlighted the program's effectiveness, but some participants suggested including more practical case studies.
- **Outreach Expansion:**
 - Increased engagement with rural hospitals and under-resourced facilities to address disparities in access to educational resources.
 - Initiatives were launched to translate key materials into multiple languages to broaden accessibility.

Discussions and Public Input:

- None.

Informational and Action Items:

- **Informational:**
 - The committee helped publish two design guides in 2024: " Design Guide for Working on Projects under OSHPD Jurisdiction – Tips from the Experts" and "Design Guide for Planning and Preparing for Disasters".

- The committee completed webinars on " Preapproved Fabricated Components and Systems" and the "PIN 50 Integrated Review."
- The new Certification Training, Construction Administrative Proficiency (CAP) program launched this year, had a 39% pass rate on the initial exam.

- **Action:**

- **Motion to Approve:** Teresa Endres, to approve the August 1, 2024, and September 26, 2024, Education and Outreach Committee meeting reports.
 - Michael Foulkes seconded the motion.
 - The report was unanimously approved.

6. "Inspect-to-Pass Approach to Field Inspections" Webinar Development Subcommittee of the Education and Outreach Committee

Facilitator: Michael L. Davis, CHI, Senior Consultant, DavisHBC, Inc; Subcommittee Chair

Michael Davis provided an overview of the October 24, 2024, draft meeting report, and an update on the progress of the "Inspect-to-Pass Approach to Field Inspections" webinar. The subcommittee aims to improve field inspection processes by standardizing best practices and fostering collaboration between regulatory agencies, healthcare facilities, and contractors. Discussions emphasized key challenges in inspection protocols, solutions to enhance efficiency, and next steps in webinar development.

A. Content Development:

- The subcommittee finalized a draft outline of the webinar to include:
 - Preparation steps for inspections, emphasizing pre-inspection documentation.
 - Strategies for resolving common compliance issues.
 - Case studies showcasing successful collaborations between inspectors, contractors, and facility owners.
- Modules were assigned to subcommittee members:
 - Michael Davis developed content for inspectors of record and testing agencies.
 - Cody Bartley focused on contractors and subcontractors.
 - Scott Mackey contributed to the design professionals of record module.

- Joe LaBrie and Monica Colosi worked on field staff processes and oversight perspectives.

B. Proposed Webinar Structure:

- Interactive sections such as live Q&A and real-time scenario demonstrations were added to enhance participant engagement.
- Participants will receive templates and checklists for use during field inspections.

C. Feedback and Adjustments:

- Pilot sessions highlighted areas for improvement:
 - Clarify the webinar title to avoid perceptions of leniency and emphasize collaboration and accountability.
 - Include region-specific examples to address geographic variations in inspection practices.

D. Launch Timeline:

- The webinar is scheduled for public rollout in March 2025, after multiple practice sessions to refine delivery.

Discussions and Public Input:

- Michael Davis reported on the first meeting of the Inspect-to-Pass Approach to Field Inspections Webinar Development Subcommittee.
- The committee assigned material development to various members:
 - Michael Davis: IOR and testing agency portion.
 - Cody Bartley: contractors and subcontractors.
 - Scott Mackey: DPORs.
 - Gary Dunger: ownership perspective.
 - Monica Colosi and Joe LaBrie: OSHPD and field staff portion.
- The committee emphasized the need for a clear definition of "inspect to pass" within the webinar, with examples of what it is and what it is not.
- The committee discussed options for renaming the webinar, with suggestions like "Successful Inspections: A Guide to Passing" to better reflect the collaborative approach.

Informational and Action Items:

• Informational:

- Overview of the group's discussions on the webinar's name, presentation content, and schedule.

1 • **Action:**

- 2 ○ Incorporate example case studies and allow for interactive discussion
- 3 periods in the Inspect-to-Pass Approach to Field Inspections webinar.
- 4 ○ Finalize the content and schedule the webinar in early 2025.
- 5 ○ **Motion to Approve:** Michael Davis to approve the October 24, 2024,
- 6 Inspect-to-Pass Webinar Development Subcommittee meeting report.
- 7 ▪ Michael Foulkes seconded the motion.
- 8 ▪ The report was unanimously approved.
- 9

10 **7. Codes and Processes Committee**

11 **Facilitator:** Michael O'Connor, Principal, Nichols, Melburg & Rossetto; Committee

12 Chair

13 Michael O'Connor provided an overview of the September 11, 2024, draft meeting

14 report, and summarized the committee's discussions on several topics:

15 **Triennial code cycle update and timelines:**

- 16 ○ Michael O'Connor provided an update on the 2025 Title 24 code package
- 17 submission process.
- 18 ○ Key deadlines include the final submission to the Building Standards
- 19 Commission in November 2024, with public hearings in December 2024,
- 20 and anticipated adoption of approved amendments in early 2025.
- 21 ○ The effective implementation date for the 2025 code changes will be
- 22 January 2026.
- 23 ○ Michael O'Connor also mentioned amendments to the Administrative
- 24 Code, including AB 869 which addresses extensions for small and rural
- 25 hospitals.

26 **Electronic Test, Inspection and Observation (eTIO) system update:**

- 27 ○ An update on the eTIO system, which is being designed to replace paper-
- 28 based reporting and enhance real-time tracking of inspections.
- 29 ○ Beta testing for the eTIO system was progressing as planned, with public
- 30 testing expected by the end of 2024.
- 31 ○ A change log feature is being added to help streamline communication
- 32 between design professionals and inspectors.

33 **Standard details development:**

- 34 ○ An update on the standard details project, focusing on intersecting wall
- 35 assemblies, one-hour ceiling assemblies, and roof assemblies.
- 36 ○ The project aims to develop details pertaining to seismic conditions and
- 37 basic framing for remodel projects, particularly for skilled nursing facilities.

Discussion and Public Input:

- None.

Informational and Action Items:

• Informational:

- Details on the triennial code cycle timeline and process, including key deadlines and amendments.
- Overview of the eTIO system development and the standard details project.

• Action:

- Finalize and distribute an onboarding guide for the eTIO system, focusing on accessibility for small and rural facilities.
- Review feedback to strengthen sustainability provisions in modular construction guidelines.
- Plan training and outreach sessions to prepare stakeholders for the 2025 code updates.
- **Motion to Approve:** Michael O'Connor, to approve the September 11, 2024, Codes and Processes Committee meeting report.
 - Carl Newth seconded the motion.
 - The report was unanimously approved.

8. Structural and Nonstructural Regulations Committee

Facilitator: Louise Belair

Louise Belair provided an overview of the October 23, 2024, draft meeting report, and summarized the committee's discussions on several topics:

- **Triennial code cycle update and timelines:** Updates on the 2025 Title 24 code package submission process, including key deadlines and the anticipated effective date of January 2026. She also highlighted amendments to the Administrative Code, including AB 869 addressing extensions for small and rural hospitals.
- **Streamlining pre-approval programs:** Summarization of the plan to update OSHPD pre-approval programs to align with the new ASCE 7-22 force equation being incorporated into the 2024 CBC. The modifications will not invalidate current pre-approvals but provide supplementary guidance.
- **Proposed PIN for Steel Quality Assurance and Quality Control:** A proposed PIN to align OSHPD QA/QC requirements with the latest IBC

and AISC standards. The intent is to enhance compliance, streamline inspections, and reduce costs.

- **Motion:** The committee unanimously approved a motion to recommend the steel QA/QC PIN for approval at the December 2024 Full Board meeting.
- **Automated seismic compliance portal:** The new automated portal to help streamline submissions of seismic compliance plans for healthcare facilities. Facilities will have access to pre-loaded historical data, enabling them to review and update existing information rather than starting from scratch. Training sessions and online resources will be provided to facilitate the submission process. Key features include pre-populated data, validation tools, dashboard access, and public transparency.
- **AB 869 and Seismic Compliance Update:** AB 869, signed into law on September 28, 2024, addresses seismic compliance for specific categories of hospitals and offers provisions to delay the January 1, 2030, compliance deadline by up to five years for certain facilities. The key components of AB 869 include eligibility for deadline extension, submission requirements, and incremental compliance milestones.
- **AB 1882 reporting requirements:** The new mandate for general acute care hospitals to report on healthcare services provided in each building. The 2024 reporting portal will open on November 1, 2024.
- **Proposed PIN for Design and Implementation of Anchorage and Bracing of NPC Items Required to Meet NPC Compliance Guidelines:** A proposed PIN focused on the design and implementation of anchorage and bracing for critical non-structural components to achieve NPC compliance. It addresses the anchorage and bracing of critical non-structural components such as mechanical equipment, piping systems, electrical conduits, and ceiling assemblies. The PIN provides detailed design criteria, construction requirements, and inspection protocols for anchoring and bracing non-structural elements. Facilities must comply with the anchorage and bracing requirements before the final 2030 compliance deadline for NPC 5.

Discussion and Public Input:

- Courtney Johnson and Jennifer Thornburg noted inaccuracies in the attribution of comments in the meeting report.
- Michael Davis suggested that the committee explore improvements in communication with rural facilities, as these facilities often face unique

challenges in accessing resources and information related to seismic compliance.

- Jennifer Thornburg recommended including additional guidance and future PINs to address specific geological constraints faced by facilities located in high seismic regions.

Informational and Action Items:

- **Informational:**

- Details on the streamlining of OSHPD pre-approval programs and the proposed steel QA/QC PIN.
- Overview of the automated seismic compliance portal development.
- Summary of the AB 1882 healthcare services reporting requirements and the proposed PIN for NPC anchorage/bracing.

- **Action:**

- HCAI to develop new administrative regulations to support implementation of AB 869.
- **Motion to Approve:** Louise Belair, to approve the October 23, 2024, Structural and Nonstructural Regulations Committee meeting report as corrected.
 - Scott Mackey seconded the motion.
 - The report was unanimously approved.

9. Instrumentation Committee

Facilitator: Martin Hudson, PhD, PE, GE, Principal Geotechnical Engineer, Hudson Geotechnics, Inc.; Committee member

Martin Hudson discussed the four major topics discussed by the Instrumentation Committee at the October 29, 2024, meeting, including seismic instrumentation, structural health monitoring, and data collection.

Seismic Instrumentation:

- Martin Hudson discussed the committee's continued work on the seismic instrumentation program, which involves the installation of instruments to measure seismic motions in healthcare facilities.

Structural Health Monitoring:

- The committee previously published a white paper on how hospital owners and users can utilize the data from the seismic instruments to understand the structural health of the buildings.

- The committee expressed concern that there has been limited promotion and distribution of this white paper, and they want to ensure stakeholders understand the utility and benefits of the structural health monitoring program.

Webinar Development:

- The committee informally agreed to establish a subcommittee with the Education and Outreach Committee to develop a webinar to educate stakeholders on the structural health monitoring white paper and promote the instrumentation program.

Data Collection and Utilization:

- The committee reviewed the data that has been collected from the various types of seismic instrumentation installed (HCAI-funded, owner-funded on new hospitals, and owner-funded on retrofits).
- The committee discussed the value of this data and the potential to highlight interesting recordings, such as the different responses observed between a new hospital in Oxnard with different foundation types.
- The committee informally recognized that developing white papers or case studies to bring attention to the instrumented data could be beneficial, as it could prompt further research and study by the scientific and engineering community.

Collaboration with HCAI:

- The committee reiterated the collaborative nature of the instrumentation program between the committee and HCAI staff.
- Future objectives include exploring ways to enable real-time earthquake response capabilities using the instrumentation data.

Discussion and Public Input:

- Scott Mackey commented that promoting the instrumentation program will help encourage other facilities to install the recording devices, as the data can provide real benefits in evaluating the health of buildings.
- Teresa Endres asked how the board and committee plan to reach out to structural and geotechnical engineers to educate them on the instrumentation program, so they can inform their clients.
- Louise Belair suggested the Education and Outreach Committee could be a good avenue to help promote the instrumentation program and white papers to the broader industry.

Informational and Action Items:

1 • **Informational:**

- 2 ○ Overview of the Instrumentation Committee's activities and future plans,
3 including hosting webinars and exploring white papers/case studies.

4 • **Action:**

- 5 ○ The committee agreed to establish a subcommittee with the Education
6 and Outreach Committee to develop a webinar promoting the Seismic
7 Instrumentation of Healthcare Facilities white paper. Explore the creation
8 of a centralized database for seismic event data to support research and
9 decision-making.

- 10 ○ **Motion to Approve:** Martin Hudson, to approve the October 29, 2024,
11 Instrumentation Committee meeting report.

- 12 ▪ Michael Davis seconded the motion.
13 ▪ The report was unanimously approved.

14
15 **10. Ad hoc Board Procedures Committee**

16 **Facilitator:** Michael Foulkes, Director, State and Local Government Affairs, Apple Inc.;
17 Committee Chair

18 Michael Foulkes provided an update on the changes made to the Board's Policies and
19 Procedures.

- 20 ○ Michael Foulkes explained that the committee met that morning to review and
21 make a couple of corrections to the Board's Policies and Procedures.
- 22 ○ The first change they discussed was regarding the frequency of board meetings.
23 Michael Foulkes stated that the Board Procedures have been updated to reflect
24 that the board will now meet “up to three times per year”, rather than a set
25 number of meetings.
- 26 ○ Michael Foulkes clarified that the number of Full Board meetings will vary
27 depending on the year: in years where there is a chair election, the board will
28 have three meetings, while in non-election years, the board will have two
29 meetings.
- 30 ○ The second change the committee made was to update the references to the
31 "Facilities Development Division" to "Office of Statewide Hospital Planning and
32 Development" within HCAI.

1 **Discussion and Public Input:**

- 2 • None.

3 **Informational and Action Items:**

4 • **Informational:**

- 5 ○ Changed the Board Policies and Procedures to make the number of times
6 the full board meets per year more flexible.

7 • **Action:**

- 8 ○ **Motion to Approve:** Michael Foulkes, to approve the changes to the
9 Board Policies and Procedures.
10 ▪ Scott Mackey seconded the motion.
11 ▪ The changes were unanimously approved.

12
13 **11. Review and approve 2025 Committee Assignments, Goals, and Meeting**
14 **Calendar**

15 **Facilitator:** Scott Mackey

16 Scott Mackey, as the incoming Board Vice-Chair, presented the recommended
17 committee assignments, goals, and meeting calendar, for 2025.

18 Scott Mackey also presented the proposed meeting dates for each committee in 2025.
19 He noted there will be two Full Board meetings in 2025: June 3 – 4 in Los Angeles, and
20 December 10 – 11 in Sacramento.

21 **Discussion and Public Input:**

- 22 • Martin Hudson expressed strong support for the assignments, commending their
23 strategic alignment with members' strengths and priorities.
24 • Teresa Endres proposed incorporating a mid-year review process to assess
25 progress on goals and refine strategies as needed.
26 • A rural hospital representative suggested additional workshops for smaller
27 facilities to address unique compliance challenges.
28 • Another participant emphasized the importance of publishing the finalized
29 calendar early to maximize public participation.

30 **Informational and Action Items:**

31 • **Informational:**

- 32 ○ Detailed breakdown of the proposed committee compositions, meeting
33 dates, and focus areas for 2025.

1 • **Action:**

- 2 ○ **Motion to Approve:** Scott Mackey, to approve the 2025 Committee
3 Assignments, Goals, and Meeting Calendar.
4 ▪ Michael Foulkes seconded the motion.
5 ▪ The assignments, goals and meeting calendar were unanimously
6 approved.

7
8 **12. Office of Statewide Hospital Planning and Development (OSHPD) Update**

9 **Facilitator:** Chris Tokas, SE, FSEAOC, CBO, Deputy Director, HCAI

10 Chris Tokas provides an end-of-year briefing, celebrating achievements and victories as
11 an organization. He emphasizes the importance of having a strategic and dynamic plan
12 of operations. The purpose for OSHPD is to advance collaboration with healthcare
13 design professionals and providers to build safe, sustainable, and resilient facilities. He
14 also highlighted the need for healthcare affordability and the importance of providing
15 valuable public service.

16 **Strategic Goals and Achievements**

- 17 • **Improving consistency in field operations:** This involved ensuring
18 uniform services across regions and improving the quality of work by
19 design professionals.
20 • **Enhancing training programs:** OSHPD implemented training in areas
21 like fire and life safety, field compliance, and structural engineering, to
22 grow staff expertise.
23 • **Enriching pre-approved details:** OSHPD shifted focus to prefabricated
24 components and systems to drive innovation and efficiency.

25 **Legislative Mandates and Compliance**

- 26 • **SB 1432:** Attempted to extend seismic compliance deadlines for all
27 hospitals but was not approved.
28 • **AB 869:** Allows small, rural hospitals to apply for three-year seismic
29 compliance deadline extension.
30 • **SB 1447:** Authorizes a three-year seismic compliance delay for Children's
31 Hospital Los Angeles.
32 • **SB 1119:** Attempted to address SPC-1 buildings that have not met
33 deadlines but was not approved.
34 • **The Glazer bill:** Allows more flexibility in building standards for outpatient
35 clinics.

- **SB 1319:** Authorizes SNFs that apply to provide therapeutic behavioral health programs to receive approval from DHCS, CDPH, and HCAI simultaneously.

Plan Review and Field Performance Update

- Reported on plan review and field performance, highlighting the workload and the distribution of projects across regions:
 - The use of matrix management to ensure efficient project review and the importance of communication between OSHPD and design professionals.
 - The anticipated approval dates for projects and the impact of the pandemic on project timelines.
 - Emphasized the importance of accountability and collaboration between OSHPD, design professionals, and owners to ensure timely project approvals.

Prefabrication and Climate Change Effects

- Highlighted the success of prefabrication projects and the benefits of using prefabricated components and systems.
- Detailed the impact of climate change on healthcare facilities and the need for resilient and independent power systems.
- Mentioned the progress on decarbonization and the potential for all-electric hospitals.
- Emphasized the importance of creating island hospitals that can operate independently during disasters.

Building Standards and Industry Coordination

- Mia Marvelli provided an update on the Building Standards Unit's (BSU) activities, including education and outreach efforts.
- Discussed the importance of frequent communication with sister agencies, such as CDPH and the California Office of State Fire Marshal.
- Highlighted the role of BSU in developing and publishing guides and codes.
- Mentioned the impact of legislative changes, such as SB 869, on OSHPD's regulations and the need for consistent messaging.

Training and Certification Programs

- Joe LaBrie discusses the goals and achievements of the Inspection Services Unit (ISU), including increasing the competency of IORs and internal staff.

- Highlighted the importance of training programs, such as the Construction Administration Proficiency (CAP) certification.
- Mentioned the success of the first CAP certification exam and the plans for future exams.
- Emphasized the value of the CAP certification for hospital administrators and design professionals.

Improving Consistency and Accountability

- Joe LaBrie discussed the efforts to improve consistency in IOR daily reports and the importance of clear communication.
- Highlighted the ongoing training programs and the focus on performance expectations for design professionals.
- Mentioned the changes to the use of terms like "inspection" and "observation" to ensure clarity and consistency.
- Emphasized the importance of accountability and collaboration between OSHPD, design professionals, and owners to achieve project goals.

Future Goals and Legislative Changes

- Joe LaBrie outlined the plans for the upcoming year, including setting new goals and focusing on key areas for improvement.
- Discussed the potential impact of new legislative changes like the chemical dependency recovery hospital bill, on OSHPD's regulations.
- Highlighted the importance of staying informed and adaptable to changes in the healthcare industry.
- Emphasized the need for continuous improvement and innovation to meet the evolving needs of healthcare facilities.

Seismic Compliance Program Status

- Roy Lobo focused on NPC compliance, with no NPC-1 buildings remaining, but 50% of buildings are NPC-2, needing upgrades by 2030.
- Outlined the requirements for NPC compliance as of January 1, 2024, including evaluation reports and water rationing plans.
- Discussed the status of NPC compliance, with 63% of hospital buildings fully compliant and 11% not submitting any requirements by the deadline.

AB 1882 and Signage Requirements

- Roy Lobo explained the public notices and posting requirements due to AB 1882, with many webinars conducted to ensure compliance.

- Status of signage compliance was presented, with 13% of hospitals not submitting any signage, and some hospitals having non-compliant signage.
- Highlighted the importance of public awareness of seismic compliance status through QR codes on hospital buildings.
- Discussed the services reporting requirements, with 76% of facilities reporting their services and 24% not reporting.

Small and Rural Hospital Relief Program

- Roy Lobo introduced the Small and Rural Hospital Relief Program created by SB 395, aimed at improving seismic resilience of small and rural hospitals:
 - The program has allocated \$1.2 million, with \$57 million remaining in the fund.
 - 3638 applications have been received, with 26 approved and 12 finalized, and efforts to reach out to 72 more hospitals.
 - Emphasis on the importance of getting hospitals to SPC-4D minimum by 2030 to continue operations beyond that date.

Pre-Approvals and Seismic Instrumentation

- Roy Lobo discussed the OSP program, which includes equipment that needs to be functional post-earthquake, with 800 OSPs ready for use.
- The OPM program for seismic bracing of components was also covered, with 740 OPMs approved.
- The OPAS program for testing labs and special inspectors was highlighted, with 59 approved agencies.
- Discussed the new formula for computing force requirements for design of non-structural components, with updates required for 2025 CBC compliance.

Emergency Operations Center (EOC) Activities

- Hussain Bhatia provided an update on EOC activities, noting that the year was busy with wildfires and earthquakes.
- Discussed the use of spotter camera networks and AI to monitor fires, with examples from the VISTA fire and Thompson fire.
- Emphasized the importance of evacuation zones and the consolidation of data by Cal OES.
- Highlighted the role of EOC in public safety power shutoffs, with no GAC facilities affected.

Cape Mendocino Earthquake and Seismic Instrumentation

- Hussain Bhatia discussed the Cape Mendocino earthquake, noting its strong magnitude and aftershocks.
- Highlighted the importance of seismic instrumentation in hospitals, with 85 hospitals currently instrumented.
- Discussed the challenges of upgrading obsolete seismic instrumentation and the need for funding.
- Emphasized the role of EOC in monitoring seismic activity and providing real-time information to hospitals.

Future Goals and Objectives

- Top three objectives for 2025:
 - smooth transition to a new headquarters
 - address new statutory changes for clinics
 - address AB 869 for seismic extensions
- Discussed the move to a new building on Richards Boulevard, with operations expected to be moved by July.
- Highlighted the transition to a cloud-based system for EOC, with efforts to ensure a smooth transition.
- Emphasized the importance of continuous collaboration with facilities to achieve seismic compliance.

Discussions and Public Input:

- David Bliss raised concerns about climate change and its impact on hospitals, including heat burden and air quality.
- The need for real-time visibility into resource availability, especially fuel, was discussed.
- The potential use of mobile supplemental energy supply systems to extend hospital operations beyond 96 hours was highlighted.
- The importance of having a reinsurance product to cover fuel delivery liabilities was emphasized.
- Committee members discussed the challenges of handling a large number of projects due to the extension not being approved.
- The importance of collaborative approaches to plan review, such as the one used for large projects, was highlighted.
- The need for the industry to start submitting projects and not make excuses about resource constraints was emphasized.
- The potential for contracting out work to meet deadlines was discussed.
- Hussain Bhatia provided additional information on the Cape Mendocino earthquake, noting that no content damage was reported in hospitals.

- The importance of building appropriately to deal with earthquakes was emphasized.

Informational and Action Items:

- **Informational:**

- OSHPD's strategic goals and achievements.
- Legislative mandates impacting OSHPD.
- Updates on plan review, field performance, and education/outreach efforts.
- Initiatives on prefabrication, climate change resilience, and all-electric hospitals.

- **Action:**

- Conduct public meetings to discuss revisions to clinic construction standards.
- Coordinate with CDPH to clarify requirements for chemical dependency recovery hospitals.
- Offer annual training program on construction administration proficiency.
- Schedule next certification exam for construction administration proficiency program

13. Special Presentation: Delivering the First All-Electric Hospital in the Nation

Facilitators: Louise Belair; Joe Brothman, Facilities and General Services Director, University of California Irvine Health; and Chris Tokas

Louise Belair, Joe Brothman, and Chris Tokas facilitated a special presentation that explored the challenges and successes of delivering the first all-electric hospital in the United States. The presentation highlighted the University of California Irvine's Medical Center campus as a cutting-edge healthcare facility. The project involved a partnership with Hensel Phelps as the general contractor, CO Architects as the architect, Degenkolb as the structural engineer, WSP/tk1sc as MEP engineers, and Stantec as the civil engineer.

1. Project Timeline and Design Build Activity:

- Joe Brothman discussed the project timeline, noting that the design build activity was conducted through digital meetings due to the COVID pandemic.
- The project included four buildings, including a central utility plant, two parking structures, and a 144-bed hospital with an emergency department, which is still under construction.

- The project goals included the University of California's carbon neutrality initiative, aiming to be carbon neutral by 2025, with healthcare operations following shortly thereafter.
- The project focused on electrification and decarbonization, designing the building to rely solely on electricity as its primary energy source and eliminating the use of fossil fuels.

2. Electrification and Decarbonization Strategies:

- Joe Brothman explained the concept of electrification, designing a building to rely solely on electricity, and decarbonization, implementing carbon neutral or low carbon energy sources.
- The project incorporated an all-electric central utility plant to provide clean, efficient energy for the building's operations.
- Decarbonization strategies included leveraging renewable energy sources like solar power to minimize the carbon footprint and partnering with utility providers to ensure clean electricity supply.
- Electrification and decarbonization went hand in hand to ensure sustainable building operations, reducing indoor and outdoor air pollution, and improving air quality for patients and staff.

3. Design Strategies and Energy Use Intensity:

- Joe Brothman discussed the design strategies for the all-electric hospital, including high-efficiency electric heat systems, electric water heating solutions, and self-imposed stretch goals for steam systems and humidification.
- The project aimed to optimize energy performance, reduce operating costs, and advance sustainability through strategies like high-performance HVAC systems, LED lighting, and advanced building automation systems.
- The energy use intensity stretch goals were tailored to the unique operational demands of different healthcare facility types, with ambitious targets for clinics and ambulatory care centers and acute care hospitals.
- The project included advanced HVAC systems for critical spaces, energy-efficient equipment, and energy recovery systems to capture and reuse waste heat.

4. Operational Impact and Financial Considerations:

- Joe Brothman transitioned to the operational impact of the project, discussing the financial aspects and maintenance costs of the all-electric system:

- Traditional centralized natural gas systems require significant infrastructure and are cost-prohibitive, while distributed electric systems are more cost-efficient and require less labor for maintenance.
- The transition to an all-electric steam system, results in a cost reduction of over \$1.4 million annually, with a simple payback time of 3.8 years.
- The project aligns with California's carbon neutrality goals, reducing greenhouse gas emissions, and improving indoor air quality, benefiting patients, staff, and the surrounding community.

5. Regulatory Implications and Future Plans:

- Chris Tokas discussed the regulatory implications, noting that there are no regulatory obstacles to the project, and that California is making great progress towards achieving net-zero energy for its built environment.
- The California Global Warming Solutions Act aims to reduce greenhouse gas emissions to 1990 levels by 2020, with further targets set for 2030 and 2045.
- The project aligns with the broader mission of UCI Health to deliver world-class care in an environmentally responsible way, reducing operational costs, and improving resilience and reliability.
- Future plans include eliminating diesel generators, introducing microgrids and battery storage, and considering the use of hydrogen as a fuel source.

Discussions and Public Input:

- Dave Bliss inquired whether the simple payback calculation included the cost of electricity and discussed the challenges around continuous generation resources for full electrification.
- Martin Hudson raised the question of exploring ground source heat exchange systems for the project.
- Carl Newth asked about the fuel source for the emergency generators in the all-electric hospital.
- There was discussion on the challenges of electrification, including the need for natural gas on-site as an intermediate step and the potential use of hydrogen as a fuel source in the future.
- The board members provided positive feedback on the project, calling it "fantastic" and praising the team's work.

Informational and Action Items

- **Informational:**

- Details on the project timeline, goals, electrification and decarbonization strategies, and energy use intensity targets.
- Operational and financial impacts of transitioning to an all-electric system.
- Regulatory implications and alignment with California's decarbonization goals.

- **Action:**

- Explore the use of ground source heat exchange systems for future projects.
- Discuss concentrated solar technologies that can generate electricity and provide domestic hot water.

14. Comments from the Public/Board Members on issues not on this agenda

Facilitator: Louise Belair

Louise Belair opened the floor for public comments

Discussions and Public Input:

- Board members expressed gratitude for Louise Belair's outstanding leadership as the chair.

Informational and Action Items:

- **Informational:**

- Jim Malley and Scott Mackey will be taking over as the new Board Chair and Vice-Chair, respectively.

- **Action:**

- None.

15. Adjournment

Facilitator: Louise Belair

Louise Belair thanked everyone for their support over the last four years, stating that it had been an enlightening and pleasant experience working with the group of professionals on the board.

Louise Belair adjourned the meeting on 12/12/2024 at 2:03 p.m.

Ad hoc Board Procedures Committee

Draft Meeting Report/Minutes

December 11, 2024



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2020 West El Camino Avenue, Suite 800
Sacramento, CA 95833
hcai.ca.gov



HOSPITAL BUILDING SAFETY BOARD Ad hoc Board Procedures Committee

Wednesday, December 11, 2024
10:00 a.m. – 12:00 p.m.

Location:

2020 West El Camino Ave, Conference Room 900, Sacramento, CA 95833
Teams Meeting Access; Meeting ID: 281 904 909 114; Passcode: NsU6eA

Committee Members Present

Michael Foulkes, Chair
Gary Dunger, Vice chair
Louise Belair

HCAI Staff Present

Joe LaBrie
Andia Farzaneh

HBSB Staff Present

Veronica Yuke, Executive Director
Marcus Palmer
Evelt Torres

1. Call to Order and Welcome

Facilitator: Michael Foulkes, Director, State and Local Government Affairs, Apple Inc.;
Committee Chair

Michael Foulkes, Chair, called the meeting to order on December 11, 2024, at 10:00 a.m., and HBSB Executive Director, Veronica Yuke called roll.

6

2. Roll Call and Meeting Advisories/Expectations

Facilitator: Veronica Yuke, Manager, HCAI; Executive Director

Veronica Yuke conducted the roll call, confirming a quorum, and outlined meeting expectations and rules of engagement for both in-person and virtual attendees.

3. Review of Board Policies and Procedures

Presenter: Michael Foulkes, Committee Chair

Discussion and Input

Michael Foulkes disclosed that the Board was scheduled to have only two, two-day Full Board meetings next year, instead of two, one-day Full Board meetings, and one, two-day Full Board meeting. Because the Board Policies and Procedures states that the that the Board meets three times a year, he noted that the Board Policies and Procedures needed to be updated to reflect the change.

The Committee discussed various wording options for changing section VII.A.1 and decided to add the words “up to” before “three times a year” and to remove “usually in April, August and December.”

Gary Dunger pointed out the need to update section V.A.1 to replace “Facilities Development Division” with the Office’s new name, “Office of Statewide Hospital Planning and Development.”

MOTION:

The committee unanimously voted to approve changing “Facilities Development Division” in section V.A.1. to “Office of Statewide Hospital Planning and Development,” and changing the second sentence of section VII.A.1 to “The Board will meet up to three times a year.”

Informational and Action item

- None

4. Discussion of future items for the Committee to consider

Presenter: Michael Foulkes, Committee Chair

Discussion and Input

- None.

Informational and Action item

- None

5. Comments from the public/committee members on issues not on this agenda

Presenter: Michael Foulkes, Committee Chair

1 **Discussion and input**

2 Mr. Foulkes mentioned that there were no upcoming scheduled meetings, but the
3 committee would convene as necessary.

4 **Informational and Action item**

- 5
 - None.

6

7 **3. Adjournment**

8 Mr. Foulkes adjourned the meeting on December 10, 2024, at approximately 10:40 a.m.

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Instrumentation Committee

Draft Meeting Report/Minutes

January 28, 2025

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2020 West El Camino Avenue, Suite 800
Sacramento, CA 95833
hcai.ca.gov



HOSPITAL BUILDING SAFETY BOARD Instrumentation Committee

**Thursday, January 28, 2025
10:00 a.m. – 4:00 p.m.**

Locations:

2020 West El Camino Ave, Conference Room 930, Sacramento, CA 95833
355 South Grand Avenue, Conference Room 2000, Los Angeles, CA 90071

Committee Members Present

Farzad Naeim, Committee Chair
Martin Hudson, Vice Chair
Jim Malley
Jennifer Thornburg

Consulting Members Present

Hamid Haddadi
Moh Huang
Tony Shakal

HCAI Staff Present

Chris Tokas
Arash Altoontash
Hussain Bhatia
Erol Kalkan
Roy Lobo
Andia Farzaneh

Ex-Officio Board Member Present

Jeremy Lancaster

HBSB Staff Present

Veronica Yuke, Executive Director
Marcus Palmer
Evelt Torres

- 1 **1. Call to Order and Welcome**
- 2 **Facilitator:** Farzad Naeim, PhD, SE, Esq, NAE, President, Farzad Naeim, Inc.;
- 3 Committee Chair (or designee)
- 4 Farzad Naeim welcomed everyone and called the meeting to order at 10:01 a.m.
- 5

1 **2. Roll Call and Meeting Advisories/Expectations**

2 **Facilitator:** Veronica Yuke, Manager, HCAI; Executive Director (or designee)

3 Veronica Yuke conducted the roll call and confirmed a quorum was met.

5 **3. Discussion on issues related to enhancing instrumentation to health**
6 **monitoring, and status of publication and distribution of the *Seismic***
7 ***Instrumentation of Healthcare Facilities* white paper.**

8 **Facilitator:** Farzad Naeim (or designee)

9 Farzad Naeim began by asking for the best way to conduct a meeting between the
10 Education and Outreach Committee and the Instrumentation Committee to discuss
11 producing a webinar on the benefits of structural health monitoring.

12 **Discussion and input:**

- 13 ● Chris Tokas suggested thinking of topics to discuss within the
14 committee. Afterwards, representatives could then decide on a time for
15 a webinar to take place and deliver the message in a manner that is
16 valuable to non-technical end-users.
- 17 ● Farzad Naeim asked that the meeting be set up for a date and time
18 that works for both committees.
- 19 ● Farzad Naeim asked whether the office could help them organize a
20 meeting with the education committee.
- 21 ● Chris Tokas stated that the topic would be included in the agenda for
22 the February 13, 2025, Education and Outreach Committee meeting.
- 23 ● Farzad Naeim noted that he would not be available to attend. Martin
24 Hudson and Jim Malley said they were available and would attend.
- 25 ● Farzad Naeim then said that a webinar should be attractive enough to
26 encourage people to take part in their course.
- 27 ● Martin Hudson contributed that the objective of a webinar was to get
28 the main points of the paper across without having to read the whole
29 paper.
- 30 ● Chris Tokas disclosed that he would incorporate parts of the white
31 paper into his presentation at the upcoming annual conference of the
32 California Society of Hospital Engineers (CSHE). Because they are in
33 hospital facilities daily, they would see the benefits of hospital
34 instrumentation.

- 1 ● Jennifer Thornburg inquired whether hospital owners typically attend
2 CSHE conferences. Chris Tokas explained that it was a mixed bag, but
3 that hospital engineers are tasked with operating the central plant and
4 the ones responsible for keeping systems going after an earthquake.
5 Jennifer agreed that it would be good advertising in that audience.
- 6 ● Tony Shakal suggested creating a two- to three-page executive
7 summary for those who do not have time to read the entire white
8 paper.
- 9 ● Jennifer Thornburg added that a good way to convince hospital owners
10 of the usefulness of this information would be to include Ali Sumer's
11 presentation on his experience in Turkey after their earthquake.
- 12 ● Wendy Bohon of California Geological Survey (CGS) suggested that in
13 addition to the webinar, a series of short videos could be helpful to
14 reach each of the white paper's intended audiences. She added that
15 because CGS also has an interest in showing the importance of
16 structural health monitoring, they would be happy to help produce
17 them.
- 18 ● Chris Tokas explained that the topic must be presented in a way that
19 clearly shows how it will ultimately benefit hospital owners and
20 operators, which is best done with storytelling.
- 21 ● Farzad Naeim said the discussion should not just be about the quality
22 and number of instruments, but also about the usefulness of
23 instruments. Their focus should be on moving to real-time health
24 monitoring.
- 25 ● Martin Hudson questioned whether to include an example of what the
26 software would look like, showing what end-users would see
27 immediately following seismic activity.
- 28 ● Erol Kalkan proposed a feature other than a software dashboard to
29 help users assess the strength of seismic activity in the moment, to
30 prevent potential chaos in hospitals.
- 31 ● Martin Hudson commented on a geotechnical instrument that he has
32 used for deformation monitoring during construction, that sends a push
33 notification to the smartphones of key personnel to receive alerts and
34 links to the software dashboard.
- 35 ● Hamid Haddadi informed that the software that CGS developed is not
36 for critical health monitoring, but instead sends a notification to
37 stakeholders when some critical parameters exceed a set threshold.

- Farzad Naeim suggested that the team should have a clear plan with methodologies and solutions ready before the webinar and to have a system in place and ready to deploy before then.
- Chris Tokas indicated that it is often beneficial to show users what already exists and what is coming in order to build anticipation.
- Farzad Naeim acknowledged the webinar's purpose is to create a network of people interested in this topic and have a vested interest in its implementation, to learn from them and develop a solution that works for them. He explained that the webinar will focus on describing the advantages of using instrumentation for structural health monitoring, the technologies available, and working on developing freely available technology that can be deployed.
- Wendy Bohon shared that they are working with an animator who works with earth science-related videos intended for the general public as the audience. She said that creating such videos is useful for general public dissemination and that the contents of the white paper could easily be incorporated into a three- to five-minute video to help people connect with why this topic matters.
- Erol Kalkan commented that hospitals with instrumentation will need real-time data processing software, but that he didn't think CGS or HCAI should be the entities to develop and maintain software that will put them in competition with the companies that already provide that service. He asked if the existing instrumentation data could be used by third-party companies instead.
- Hamid Haddadi stated that through CSMIP, CGS has already upgraded 47 HCAI funded stations which are ready for real-time monitoring. Chris Tokas added that the data is already made available to the public.
- Hamid Haddadi shared that they have been working on a feature to allow hospital owners to receive stations' communication data. For some hospitals, CSMIP uses hospital networks for transferring data and for others, CSMIP can set up separate communications with hospitals that do not require access to the hospitals' networks.
- Hamid Haddadi confirmed that data can also be made available through a data center in near real time. He went on to clarify that near real-time would be approximately a 5-minute window within which data can be collected, processed, and made available on the website.

- Hamid Haddadi added that CSMIP is not streaming data from the structural stations, because the cost of communication would increase significantly. CSMIP is using a data acquisition and management system instead that starts to stream as soon as the level of shaking exceeds the threshold.
- Farzad Naeim noted that what is needed is a system in place that understands where the instruments are and an algorithm developed to estimate damage based on that in near real-time and automatically sends push notices to authorized personnel.
- Hamid Haddadi, upon inquiry from Tony Shakal, said that data users can set up a script and query the information on the CSMD server as soon as it becomes available.
- Hamid Haddadi gave a few examples of CSMIP data sharing, including a system in collaboration with Golden Gate Bridge, whereby as soon as the drift ratio exceeds a certain value, the bridge engineers and management are notified that they may need to respond to the earthquake.
- Chris Tokas explained that owners should be made aware of the usefulness of the system, so they do not feel forced or coerced into installing it.
- Martin Hudson suggested the webinar could explain the system's usefulness by showing pictures or videos explaining how some buildings have historically been evacuated for minor architectural reasons and then go on to explain that if the owner knows about those minor architectural reasons, they will not evacuate the building when they don't need to.
- Chris Tokas echoed that there is a need for building owners to know the differences between minor architectural damage and damage that would force the building to be red tagged.

Committee Comments

- Martin Hudson commented that it had been a good session because the committee had started to develop a framework for some of the things that are to be included in the webinar agenda and not just the white paper, which he said is very valuable.

Public Comments

- None.

4. Planning Tasks and Objectives for 2025 and Beyond

Facilitator: Farzad Naeim

Farzad Naeim introduced this part of the meeting by saying that they have to enumerate everything the committee aims to achieve in 2025, with the primary objective being getting the webinar up and running and completing all the tasks needed to make the technology accessible and available for near real-time health monitoring that is useful for end users and hospital administrators.

Discussion and Input:

- Jim Malley said they still need to work with CGS to establish which buildings are to be fitted with instruments in the near future.
- Farzad Naeim said that among the list of buildings to be instrumented, there are seven wood frame buildings that are to be done this year. Hamid Haddadi commented that they are running behind schedule for wood frame buildings because they have been talking with property owners and have had meetings to discuss documentation but because of delays in the contract they are not sure they will be completed as scheduled.
- Ali Sumer said that they have been having meetings with hospital managers and once they get the green light, they will meet with Hamid Haddadi's team to arrange hardware purchase and installation.
- Roy Lobo stated that most buildings to be instrumented were built before 1973 and are slated to be retrofitted. He added that some maybe instrumented before retrofit, but same may not.

Committee Comments

- None.

5. Comments from the Public/Committee Members on Issues not on this Agenda

- None.


6. Adjournment

Farzad Naeim adjourned the meeting at 11:25 a.m.

Energy Conservation and Management Committee

Draft Meeting Report/Minutes

April 2, 2025



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2020 West El Camino Avenue, Suite 800
Sacramento, CA 95833
hcai.ca.gov



HOSPITAL BUILDING SAFETY BOARD
Energy Conservation and Management Committee

Wednesday, April 2, 2025
10:00 a.m. – 4:00 p.m.

Locations:

2020 West El Camino Ave, Conference Room 930, Sacramento, CA 95833
355 South Grand Avenue, Conference Room 2000, Los Angeles, CA 90071

Committee Members Present

Cody Bartley, Committee Chair
John Griffiths, Vice-Chair
Louise Belair
Janice Cheung
Jennifer Cox
Gary Dunger
Michael Foulkes
Scott Mackey
Carl Newth

Consulting Member Present

David Lockhart

HCAI Staff Present

Chris Tokas, FDD Deputy Director
Richard Tannahill
Arash Altoontash
Mia Marvelli
Jamie Schnick
Nanci Timmins
Andia Faraneh

HBSB Staff Present

Veronica Yuke, Executive Director
Marcus Palmer
Evet Torres

1 **1. Call to order and Welcome**

2 **Facilitator:** Cody Bartley, DPR Construction; Committee Chair (or designee)
3 Cody Bartley called the meeting to order at 10:00 a.m., on April 2, 2025.

5 **2. Roll Call and Meeting Advisories/Expectations**

6 **Facilitator:** Veronica Yuke, Manager, HCAI; Executive Director (or designee)
7 Veronica Yuke conducted roll call, and a quorum was established. She reviewed
8 meeting expectations, including rules for participation, muting, and voting via roll call.

10 **3. Evolution of Microgrid Technologies to Support Healthcare Facilities in
11 California**

12 **Facilitator:** Ryan De La Cruz, CEM, PMP, Vice President, Microgrid
13 Development, Endurant Energy (or designee)

14 **Discussion and Input:**

15 Ryan De La Cruz opened the session by defining microgrids based on the U.S.
16 Department of Energy's standard. He described microgrids as interconnected loads and
17 DERs that can operate independently or in tandem with the main electrical grid.

18 Ryan traced the origin of healthcare resilience to key events—the 1965 Northeast
19 blackout and the 1971 San Fernando Earthquake—which led to regulatory reforms like
20 SB 519 and the Alfred E. Alquist Hospital Facilities Seismic Safety Act. These
21 regulations initiated the requirements for hospitals to maintain structural and power
22 integrity during emergencies.

23 He outlined how diesel generators became the standard for emergency power due to
24 seismic certification, fuel stability, cost-effectiveness, and familiarity. He highlighted that,
25 although many DERs such as CHP, solar, and fuel cells are already deployed for cost-
26 saving or sustainability goals, they are rarely used for emergency power due to two
27 main challenges:

- 28 • Lack of seismic certification.
- 29 • Perceived reliability concerns compared to diesel generators.

30 Ryan De La Cruz shared that manufacturers have shown limited urgency to pursue
31 seismic certification due to the complexity and cost of shake-table testing. He
32 emphasized the need for healthcare providers and regulators to advocate for seismic
33 compliance and noted progress in specific projects like Kaiser Permanente Ontario.

1 He forecasted broader adoption of microgrids over the next decade, driven by:

- 2 • Technological advancements (e.g., smarter controllers and AI).
- 3 • New funding models (e.g., energy-as-a-service).
- 4 • Multiple value streams such as demand response and energy arbitrage.

5 He concluded with the Department of Energy's vision: by 2035, microgrids will be critical
6 to resilience, decarbonization, and affordability in healthcare infrastructure.

7 **Committee and Public Comments:**

- 8 • Cody Bartley asked why more manufacturers aren't pursuing seismic
9 certification.
- 10 • Ryan De La Cruz explained it's due to cost and lack of demand signals; he
11 suggested education and pilot project funding as key solutions.
- 12 • Jamie Schnick informed the group that one microturbine had achieved OSP
13 seismic certification and optimism exists that more will follow.
- 14 • John Griffiths praised the timeline analysis and shared concerns about long-term
15 infrastructure compatibility.
- 16 • A member of the public confirmed that demand response is a leading driver for
17 microgrid adoption nationwide.

18 **Action Items:**

- 19 • None during this agenda item.

21 **4. Impact and opportunity of Assembly Bill (AB) 2208 ban of fluorescent lamp 22 sales in California**

23 **Facilitator:** John Griffiths, PE, Electrical Engineer, CONTECH-CA;
24 Committee Vice-Chair (or designee)

25 **Discussion and Input**

26 The committee engaged in an in-depth discussion following presentations by Sean
27 Eyler and Jamie Schnick.

- 28 • Sean Eyler introduced the HEFI, explaining how healthcare facilities could
29 receive utility rebates and no-cost energy audits.
- 30 • He outlined the program structure, described the on-bill financing model and
31 emphasized benefits like energy savings, lower maintenance costs, and project
32 implementation support.

- 1 • Sean Eyler detailed available utility incentives through PG&E's Healthcare
2 Energy HEFI:
 - 3 ○ \$0.10/kWh and \$1/therm savings-based incentives.
 - 4 ○ Free audits, project engineering, and support.
 - 5 ○ On-bill financing (0% interest loans up to \$4 million per site) structured for
6 bill neutrality.
- 7 • Sean Eyler highlighted lighting retrofits in response to AB 2208 and described
8 project types like retro commissioning, equipment replacement, and HVAC
9 optimization.
- 10 • He stated that the program services are free and funded by utility surcharges
11 already paid by customers.
- 12 • Sean Eyler also reviewed examples of successful lighting and central plant
13 upgrade projects and reiterated the opportunity to stack multiple efficiency
14 projects with phased loans.
- 15 • Jamie Schnick discussed that PIN 13 on LED Lighting Retrofit has been
16 incorporated into the FREER manual, where it is meant to help streamline the
17 processes of permitting and changing out the fixtures.
- 18 • Jamie Schnick explained that the FREER manual clarifies which category LED
19 lighting retrofits projects fall into: Excluded work, which may not require
20 submission to HCAI; Field Review, which requires submission but may only
21 require review by field staff; or Expedited Review, which requires submission for
22 plan review, but is put at the front of the list.

23 **Committee and Public Comments:**

- 24 • John Griffiths asked if other utilities like SoCal Edison offered similar programs.
25 Sean Eyler confirmed that SoCal Edison is preparing to launch its own version of
26 the program.
- 27 • David Lockhart clarified that while engineering services are free, construction
28 costs would be financed through the utility bill.
 - 29 ○ He asked about competition among vendors and questioned why more
30 hospitals weren't using the program despite its benefits.
 - 31 ○ David emphasized that hospitals already pay into this program and should
32 be taking advantage of it. He described it as a "no-brainer" and asked how
33 outreach efforts were being conducted.

- Sean Eyler responded that participation has recently surged, noting that the program's launch in 2021 was slowed by COVID-related disruptions. He confirmed that outreach is ongoing and includes CSHE meetings and direct contact with facilities.
- John Griffiths asked when the streamlined lighting retrofit permit process would be readily available and if there was a webinar planned. Chris Tokas reported that a guide would be created, explaining how to submit and execute projects expeditiously and that a webinar might be considered for late summer.
- John Griffiths asked if part of the roll out included educating inspectors and field staff. Jamie Schick affirmed that there are monthly in-house technical meetings on this topic and the information is shared with engineers and field staff to ensure consistency of knowledge across the regions.
- Carl Newth asked if the fixture retrofit process applied to lighting controls. Jamie Schnick explained that changing out light controls "one for one" is fine, but if lighting control is being changed in order to change the control system, OSHPD would need to look at the design.

Informational and Action Items

Sean Eyler provided details on:

- AB 2208 and its impact on lighting systems.
- HEFI program structure, rebate levels, and technical assistance.
- Specific examples of past healthcare facility projects with:
 - Energy savings (kWh and therms),
 - On-bill financing amounts,
 - Payback periods,
 - Types and quantities of LED installations.
- Integration of energy savings with broader microgrid planning, referencing previous agenda items.

5. Microgrids Update

Facilitator: Jamie Schnick, Senior Electrical Engineer, HCAI (or designee)

Discussion and Input

Jamie Schnick provided a comprehensive update on the current status and future direction of microgrids in California healthcare facilities. He explained that the mission of

1 the OSHPD Microgrid Task Force is to accelerate the implementation of compliant
2 microgrids by streamlining regulatory processes, providing consistent project review,
3 and increasing awareness across the healthcare sector.

4 Jamie Schnick discussed key demonstration projects that illustrate how healthcare
5 facilities are deploying Distributed Energy Resources as alternatives to diesel
6 generators. These included:

- 7 • Kaiser Permanente San Marcos Campus: Installed a 1.7 MW fuel cell to supply
8 100% backup power alongside traditional emergency generators.
- 9 • Kaiser Permanente Ontario: Developed one of the largest renewable energy
10 microgrids for a 224-bed hospital. The system includes 2 MW of solar, 9 MWh of
11 battery storage, 1 MW of fuel cell power, and 6 MW of diesel generation.
- 12 • Valley Children's Healthcare and five SNFs in Northern California: Designed to
13 fully back up critical loads using alternate power sources in compliance with
14 Assembly Bill 2511.

15 Jamie Schnick emphasized that these projects aim to prove that microgrids can be
16 code-compliant and as reliable as diesel-based emergency power systems. He
17 highlighted the regulatory progress made to legitimize healthcare microgrids:

- 18 • 2021 NFPA 99 introduced the term "health care microgrid."
- 19 • 2023 NEC added healthcare microgrids as acceptable EPS.
- 20 • 2022 CEC incorporated 2023 NEC language ahead of schedule, effective July 1,
21 2024.

22 He concluded by stating that these advancements signal a regulatory environment that
23 increasingly supports clean, resilient energy alternatives in healthcare infrastructure.

24 **Committee and Public Comments:**

- 25 • Jennifer Cox inquired as to why Skilled Nursing Facilities were excluded from the
26 CMS waiver. Nanci Timmins replied that CMS has a specific regulation for long-
27 term care that can't be superseded.
- 28 • Scott Mackey asked how long microgrids need to be in operation to be
29 determined as sufficiently reliable. Jamie Schnick replied that it needs to be long
30 enough to demonstrate that they are at least as reliable as generators, which is
31 where commissioning plans comes into play.

Informational and Action Items

Jamie Schnick presented the following as informational items:

- The status of microgrid demonstration projects across various healthcare facilities in California.
- The regulatory progress in NFPA and NEC codes recognizing healthcare microgrids as EPS.
- The ongoing work of the OSHPD Microgrid Task Force, which aims to reduce approval barriers and promote code-compliant implementation of microgrids in healthcare.

6. Discussion on potential future meeting topics

Facilitator: Cody Bartley (or designee)

Cody Bartley initiated the discussion by outlining the objective of identifying relevant topics for future Energy Conservation and Management Committee meetings. He introduced three key focus areas for committee consideration:

- A. Removal from Acute Care Services (RACS): Cody Bartley explained that when buildings are removed from acute care service, energy-saving opportunities often go unrealized. He encouraged discussion around how facilities can reduce energy consumption in unused or shelled spaces before returning them to local jurisdiction.
- B. Hospital Commissioning: Cody Bartley noted that healthcare building systems are becoming increasingly complex. He posed a question to the committee about identifying the most effective and efficient practices for commissioning hospitals, both new and existing.
- C. Impacts of Extreme Natural Hazard Events: Cody Bartley stated that high-temperature events and equipment not rated for new environmental extremes have led to system failures in some hospitals. He asked the committee to consider best practices to strengthen existing and future building systems against such hazards.

Committee and Public Comments:

- John Lockhart expressed the importance of topics B and C, Hospital Commissioning and Impacts of Extreme Natural Hazard Events. As a hospital operator, he explained that commissioning, if done at all, is often left for last before the hand-off, and that fault detection analytics works well for taking a building and its system through its paces. He added that the commissioning

process and understanding best practices could help mitigate the impacts from extreme weather.

- Chris Tokas agreed, citing that because of the increase of technological advancements being incorporated into hospital buildings, failure mode analysis has to play a more important role and suggested the Committee consider development of a white paper on the topic.
- Cody Bartley suggested getting a commissioning agent to come speak to the Committee.
- Chris Tokas explained the importance of first educating hospital owners on the importance of commissioning.
- John Griffiths disclosed that in his experience, hospital owners are reluctant to pay an agent to commission the building why they already paid an engineer to design it and a contractor to build it. Dave Lockhart suggested the solution is to make design engineers accountable for the performance of the design, because hospital owners are having to buy a product that has not been proven to meet the design criteria that was promised and agreed upon.

Informational and Action Items

Cody Bartley recorded the following informational items:

- The committee reviewed and discussed three preliminary topics for future meetings, which included energy-saving strategies during RACS, improved commissioning practices, and responses to extreme weather-related system failures.

7. Comments from the Public/Committee Members on Issues not on this Agenda

Facilitator: Cody Bartley (or designee)

Cody Bartley opened the floor for any final comments from committee members or members of the public regarding issues not listed on the current agenda. He reminded attendees that the Committee could not act on or discuss items outside the scope of the posted agenda but may consider such items for future meetings.

Committee and Public Comments

- Scott Mackey requested that the next Committee meeting be rescheduled because there is a Healthcare Facility Forum event scheduled for October 8, 2025, that David Bliss and Jamie Schnick have been invited to speak.
- Veronica Yuke suggested rescheduling it to October 9, 2025, and the Committee agreed.

1 **Informational and Action Items**

2 None.

3 **8. Adjournment**

4 Cody Bartley confirmed that all agenda items had been addressed. He thanked the
5 committee members, presenters, HCAI staff, and public attendees for their participation
6 and engagement throughout the meeting.


7 Cody Bartley adjourned the meeting at 1:00 p.m.

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Structural and Nonstructural Regulations Committee

Draft Meeting Report/Minutes

March 12, 2025



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2020 West El Camino Avenue, Suite 800
Sacramento, CA 95833
hcai.ca.gov



HOSPITAL BUILDING SAFETY BOARD Structural and Nonstructural Regulations Committee

**Wednesday, March 12, 2025
10:00 a.m. – 4:00 p.m.**

Locations:

2020 West El Camino Ave, Conference Room 930, Sacramento, CA 95833
355 South Grand Avenue, Conference Room 1901, Los Angeles, CA 90071

Committee Members Present

Jim Malley, Chair
Michael Davis
Teresa Endres
Martin Hudson
Courtney Johnson
Jennifer Thornburg

Consulting Member Present

Mark Hershberg

HCAI Staff Present

Chris Tokas, OSHPD Deputy Director
Arash Altoontash
Richard Tannahill
Roy Lobo
Mia Marvelli
Ali Sumer
Andia Farzaneh

HBSB Staff Present

Veronica Yuke, Executive Director
Marcus Palmer
Evet Torres

1. Call to Order and Welcome

Facilitator: Jim Malley, SE, Senior Principal, Degenkolb Engineers; Committee Chair
(or designee)

Jim Malley called the meeting to order at 10:00 a.m. on March 12, 2025. He welcomed all attendees, confirmed audio/visual connections with Los Angeles, and initiated the meeting of the Hospital Building Safety Board Structural and Nonstructural Regulations Committee.

2. Roll Call and Meeting Advisories/Expectations

Facilitator: Veronica Yuke, Manager, HCAI; Executive Director (or designee)

Veronica Yuke conducted the roll call, confirming that a quorum was present. She reviewed expectations for virtual participation, including muting when not speaking, chat/reactions protocol, and identifying oneself before speaking.

3. Triennial Code Cycle update and timelines on proposed amendments to the 2025 California Building Standards Code Title 24, Part 1, Part 2, and Part 10

Facilitator: Mia Marvelli, Architect, Supervisor; HCAI (or designee)

Discussion and Input:

Mia Marvelli presented an update on the status and upcoming actions for the 2025 California Building Standards Code (Title 24, Parts 1, 2, and 10). She explained that:

- In December 2024 and February 2025, the California Building Standards Commission (CBSC) adopted all agency rulemaking proposals.
- These proposals now form the 2025 version of the codes, incorporating new model codes reviewed by multiple committees, including Structural and Nonstructural Regulations.
- The official publication will be available July 2025 with an effective date of January 1, 2026.

Mia Marvelli emphasized that they have moved on to working on the Intervening Code Cycle Supplement (“blue pages”), which will become effective July 1, 2027. She provided a timeline detailing internal deadlines, review cycles, and expected board actions:

- Internal code discussions: January–June 2025
- Deputy Director review: July 2025
- Codes and Processes Committee preliminary overview: May 2025
- Formal review meetings:
 - Codes and Processes Committee: September 10, 2025
 - SNSR Committee: October 2025
 - Full Board approval: December 2025
- Final submittal to CBSC: December 1, 2025

She noted that most amendments will affect the Administrative Code, Building Code Volume 2, and the Existing Building Code.

1 In addition to structural updates, Mia Marvelli outlined HCAI's involvement in ongoing
2 code assessments, including:

- 3 • Reviewing Tentative Interim Amendments (TIAs) from NFPA and other model
4 code agencies.
- 5 • Updating reference standards as national code committees introduce changes.
- 6 • Incorporating feedback from stakeholder queries and clarifying ambiguous code
7 provisions.
- 8 • Supporting legislative implementation such as SB 1382, which affects OSHPD 3
9 clinic code changes for alternative birthing clinics.

10 **Informational and Action Items:**

- 11 • Publication of 2025 code is scheduled for July 2025.
- 12 • Effective date of new code: January 1, 2026.
- 13 • Next priorities: Prepare 2025 Supplement and finalize changes for submission by
14 December 2025.
- 15 • HCAI to hold two public meetings regarding SB 1382 and stakeholder feedback
16 sessions with CPCA and other clinic organizations.

17 **Committee and Public Comments:**

- 18 • Teresa Endres (Board Member) asked for clarification on:
 - 19 ○ The meaning of "TIA" — Mia Marvelli explained it stands for Tentative
20 Interim Amendment, typically issued by national code bodies like NFPA.
21 California reviews and selectively adopts these through its formal process.
 - 22 ○ How external input from architects and stakeholders can be submitted;
23 Mia directed feedback to the Regs Unit email.
 - 24 ○ She referenced a plumbing fixture code concern as an example and
25 raised issues around defining mobile equipment in design documents.
- 26 • Chris Tokas and Mia Marvelli contributed clarifications:
 - 27 ○ Chris Tokas explained past efforts to define and differentiate mobile vs.
28 fixed counters and their structural attachment implications.
 - 29 ○ Mia Marvelli elaborated on how these code clarification requests
30 contribute to the annual list of recommended code changes.

1 **4. Streamlining the use of existing OSHPD Preapproval Programs to align with**
2 **the new nonstructural component force equation in ASCE 7-22**

3 **Facilitator:** Timothy Piland, SE, Senior Structural Engineer; HCAI (or designee)

4 **Discussion and Input:**

5 Timothy Piland presented an update on changes related to preapproval programs in
6 response to the updated ASCE 7-22 structural provisions, now incorporated into the
7 2025 California Building Code (CBC). He emphasized that significant updates to
8 equation 13.3-1 and tables 13.5-1 and 13.6-1 affect force calculations for architectural
9 and mechanical components.

10 To address these changes, HCAI developed a simplified compliance approach and
11 created a free educational webinar, scheduled for Wednesday, April 9, 2025. The
12 webinar will:

- 13 • Explain the modifications to F_p , the design force variable.
- 14 • Review the new variables introduced in Chapter 13.
- 15 • Clarify implications for both the OSP (Special Seismic Certification Preapproval)
16 and OPM (Preapproval of Manufacturer's Certification) programs.
- 17 • Provide examples for applying the new design approach in real projects.
- 18 • Outline new requirements for submittals under the updated standards.

19 Timothy Piland noted that:

- 20 • The webinar flyer was distributed to over 1,100 recipients, including engineers,
21 manufacturers, and design professionals involved in preapproval programs.
- 22 • Over 400 people had already registered.
- 23 • The goal is to support proactive adoption of the new standards and reduce
24 confusion over force amplification methods under ASCE 7-22.

25 **Informational and Action Items:**

- 26 • Webinar Date: April 9, 2025
- 27 • Topic: Transitioning OSHPD OSP and OPM programs to ASCE 7-22
- 28 • Distribution: Notification sent to manufacturers, licensed engineers, and
29 stakeholders
- 30 • Objective: Facilitate consistent implementation and reduce design errors under
31 the new force equations

Committee and Public Comments:

- Teresa Endres asked whether the webinar would be available on the HCAI website.
 - Timothy Piland confirmed that it would be posted under the Webinars page on the HCAI site.
- Jim Malley expressed appreciation for the timing and clarity of the webinar, noting the complexity and impact of the ASCE 7-22 updates on design calculations. He commended the HCAI team for staying ahead of industry needs and helping standardize the implementation process.

5. Policy Intent Notice (PIN) 77 for Steel Quality Assurance (QA) and Quality Control (QC)

Facilitator: Roy Lobo, Principal Structural Engineer, HCAI (on behalf of Mohammad Karim, PhD, SE, Supervisor, HCAI)

Discussion and Input:

Roy Lobo delivered an update on Policy Intent Notice (PIN) 77, confirming that the document is now officially published and available on the HCAI website. PIN 77 establishes updated guidelines for Steel Quality Assurance and Quality Control, specifically targeting construction submittals and inspections involving steel components in healthcare facilities.

Roy Lobo clarified that:

- PIN 77 was already presented in detail during the previous Structural and Nonstructural Regulations Committee meeting, where it was reviewed with comprehensive commentary.
- The current session served to formally announce its publication and inform the committee that it is ready for application in both current and upcoming submittals.

Informational and Action Items:

- PIN 77 provides clear, codified standards for QA/QC related to steel fabrication and erection.
- PIN 77 – Steel QA/QC is available for public download on HCAI Website
- New projects designed under the 2025 code cycle may incorporate PIN 77 directly.
- For existing projects, applicants must revise their already-approved specifications and submittals if they choose to apply PIN 77 retroactively. Roy Lobo indicated

1 that these revisions may involve updates to the project's TIO forms and
2 referenced standards.

3 **Committee and Public Comments:**

- 4 • Jim Malley asked for clarification on how PIN 77 applies to active versus future
5 submittals.
 - 6 ○ Roy Lobo responded that for 2025 code projects, the use of PIN 77 is
7 straightforward and encouraged.
 - 8 ○ For previously approved projects, applying PIN 77 would require
9 modification of submitted documents, guided by a footnote in the PIN that
10 explains the transition procedure.
- 11 • Jim Malley acknowledged the guidance as a valuable step forward in steel
12 QA/QC protocols and thanked Roy Lobo for the update.

14 **6. New automated Seismic Compliance Project portal to facilitate submittals of** 15 **updated compliance plans**

16 **Facilitator:** Ali Sumer, PhD, SE, Supervisor, HCAI (or designee)

17 **Discussion and Input:**

18 Ali Sumer introduced the new automated seismic compliance project portal, developed
19 to modernize and streamline the submission process for seismic compliance plans. He
20 explained that while the fundamental requirements for seismic compliance plans have
21 remained unchanged since 1994, the method of submission has evolved; from paper, to
22 PDF, to now a dynamic, interactive online portal launched on March 3, 2025.

23 Ali Sumer emphasized that the new system:

- 24 • Supports facilities in fulfilling updated regulatory obligations by January 1, 2026.
- 25 • Enables each hospital to submit a building-by-building compliance plan,
26 specifying whether they will retrofit, demolish, replace, or otherwise address
27 seismic risks.
- 28 • Allows facilities to report on SPC and NPC statuses for each building.

29 The new portal includes:

- 30 • Prepopulated building data for each facility (i.e., building names, SPC/NPC
31 ratings).
- 32 • Drop-down menus for compliance strategy selection.

- Detailed milestone tracking and self-reported status updates (i.e., “Not Started,” “In Progress,” “Completed”).
- HCAI review/comment fields for each building line item.
- A built-in “Critical Milestones” mechanism to determine if facilities remain on track toward seismic compliance by 2030 or extended deadlines.

The interface was designed using a user-centered design approach to ensure accessibility and ease of use, even for smaller or rural hospitals. A user guide and PIN 80 accompany the release, detailing procedures for both compliance plan submissions and applications for delay under AB 869.

Ali Sumer confirmed that all submitted compliance plans and HCAI determinations will be publicly visible on the HCAI website to promote transparency and accountability.

Informational and Action Items:

- Portal Launch: March 3, 2025
- Compliance Plan Deadline: January 1, 2026
- Facilities must specify:
 - Compliance methods - demo, retrofit, replacement
 - Related milestones and timeline
- PIN 80 published March 4, 2025, outlines compliance requirements and delay procedures
- HCAI to provide ongoing feedback and field verification of milestone statuses
- Critical milestones will be used to determine overall project progress and risk of noncompliance

Committee and Public Comments:

- Martin Hudson asked whether users had begun engaging with the portal and whether feedback had been received.
 - Ali Sumer responded that an application was submitted the same day the webinar aired and that additional questions have been received mainly from smaller hospitals needing clarification on SPC/NPC concepts.
 - He confirmed that user response has been positive, and early questions indicate facilities understand the concept well.
- Jim Malley asked about roles and responsibilities in completing the portal application.

- Ali Sumer clarified that administrators, contractors, or design professionals can complete the submittals as long as they have the facility's unique PIN and password.
- Chris Tokas elaborated on the design philosophy, emphasizing a “human-centered” approach aimed at:
 - Reducing back-and-forth delays
 - Eliminating bureaucratic complexity
 - Promoting accurate, timely submissions
- Jim Malley and Chris Tokas further discussed the statutory requirement that compliance plans remain current and updated throughout the life of the project—a requirement that has historically been neglected.

7. Advisory Guide: A13 – NPC Upgrade Construction Process for Existing Ceilings and Above Ceiling Utilities

Facilitator: Ali Sumer (or designee)

Discussion and Input:

Ali Sumer provided a detailed overview of Advisory Guide A13, which introduces an alternative method for completing NPC upgrade projects involving existing utility systems located above ceilings in hospital facilities.

Ali Sumer explained that this guide is specific to NPC utility upgrades and is not intended for projects involving equipment upgrades, tenant improvements, or new construction. The A13 guide is intended for facilities where existing conditions are largely unknown—a common situation in older or complex hospital buildings.

Ali Sumer emphasized that the A13 approach:

- Is most effective when documentation is limited, or ceiling access is constrained.
- Allows phased, strategic construction activities by splitting the scope into manageable zones (i.e., ICU, radiology).
- Facilitates a survey-as-you-go process, where details are refined in the field based on what is discovered during ceiling access.
- Encourages using typical details selected from OSHPD Preapproval Manuals appropriate to each building's construction type (wood or concrete), while prohibiting blanket inclusion of entire OPMs.

The process includes:

1. Initial preparation of typical details and building-specific information.
2. Permit issuance under a T&M basis.
3. First on-site assessment, where the design professional, contractor, and HCAI field staff jointly evaluate existing conditions.
4. Field installation of bracing and upgrades as needed.
5. Completion of each milestone area with ongoing layout drawing updates and thorough photo documentation.
6. Final submittal of “as-built” drawings to close out the project.

He emphasized that design professionals, not contractors, must lead field decisions, and that photo documentation is critical throughout the project lifecycle.

Ali Sumer further explained the decision-making process:

- If most conditions are known, the standard NPC submittal process is more efficient.
- If conditions are unknown or complex, the A13 guide is ideal, even though it requires more engagement from field staff and designers.

He also noted that if a new condition is discovered mid-project, a new OPM detail may be submitted as a Non-Material Amendment. If further customization is needed, an ACD is required.

The guide promotes transparency and accountability by requiring each milestone’s closure to be verified by HCAI field staff.

Informational and Action Items:

- Advisory Guide A13 is available online and will be featured in a dedicated webinar on Tuesday, March 18, 2025.
- The process is intended to:
 - Simplify NPC upgrades for unknown conditions.
 - Reduce planning-phase uncertainty.
 - Increase adaptability for hospitals during phased construction.
- Design professionals must:
 - Maintain updated layout drawings throughout the project.
 - Submit as-built documentation for final approval.

- HCAI will perform spot checks to verify work before milestone sign-off.

Committee and Public Comments:

- Teresa Endres expressed appreciation for the inclusion of two flowcharts that explain when and how to use the A13 guide.
 - She emphasized how critical it is to take lots of photos, noting that even experienced teams often forget to document essential components once ceilings are closed.
 - Teresa Endres thanked Ali Sumer for helping non-engineers clearly understand the process.
- Martin Hudson asked whether LiDAR technology was being used to map above-ceiling spaces.
 - Ali Sumer confirmed that LiDAR is increasingly used, especially in complex environments, although limitations exist in congested areas.
 - Jim Malley added that his firm uses LiDAR frequently and recently adopted wearable shoulder-mounted scanners to increase mobility and capture quality. He noted LiDAR's particular usefulness in mechanical rooms and subgrade spaces but acknowledged its limitations above ceilings.
- Chris Tokas reiterated the importance of simplifying processes on the front end to minimize back-and-forth corrections during construction. He emphasized that the process was designed with both technical reliability and user accessibility in mind.

8. Seismic compliance update on recently signed legislation: AB 869 (Chapter 801), and PIN development

Facilitator: Ali Sumer (or designee)

Discussion and Input:

Ali Sumer presented a comprehensive overview of the seismic compliance updates related to AB 869 and the development of PIN 80. He stated that AB 869, signed into law in late 2024, allows certain qualifying hospitals to request a three-year extension beyond the original January 1, 2030, seismic compliance deadline. This extension is specifically for hospitals demonstrating financial distress or other qualifying conditions.

Ali Sumer noted that the compliance plan portal, launched on March 3, 2025, was designed to support this legislative change and aligns with the new regulatory requirements. Alongside the portal, PIN 80 was released on March 4, 2025, providing

1 procedural guidance for both standard seismic compliance plan submissions and delay
2 applications under AB 869.

3 Ali Sumer clarified the eligibility criteria under AB 869, which applies to:

- 4 • Distressed hospital loan program recipients.
- 5 • Small and rural hospitals.
- 6 • Critical access hospitals.
- 7 • District hospitals with specific exceptions.

8 To be eligible, hospitals must:

- 9 • Submit an NPC-5 report by January 1, 2025 (an extension of the original January
10 1, 2024, deadline).
- 11 • Submit an updated compliance plan by January 1, 2026, using the automated
12 portal.

13 Ali Sumer explained that hospitals requesting a delay must outline:

- 14 • A building-by-building compliance strategy.
- 15 • A clearly defined list of milestones and completion dates.
- 16 • A justification for the requested delay, including supporting financial
17 documentation and explanations of conditions beyond the hospital's control.

18 Ali Sumer emphasized that while a three-year extension is permitted under the law, an
19 additional two-year extension may also be granted in the future if the hospital
20 demonstrates a new hardship that is clearly outside its control. However, applications
21 for this further extension will not be considered until after January 1, 2030.

22 He also clarified that while hospitals may request extensions, interim deadlines for
23 planning and design submissions, 2026 and 2028, remain unchanged. These interim
24 benchmarks ensure that hospitals continue progressing toward final compliance,
25 regardless of eligibility for delay.

26 Ali Sumer shared that HCAI has identified 130 potential facilities that may qualify under
27 AB 869, though not all may meet the final eligibility requirements. To aid transparency,
28 HCAI published a list and encouraged facilities to review it and reach out with
29 clarifications or disputes.

30 Additionally, HCAI incorporated flowcharts into the application guide to help facilities:

- 31 • Determine eligibility.

- 1 • Understand required documentation.
- 2 • Navigate the application process and updates.
- 3 • Plan for revisions in case of evolving circumstances.

4 The delay application itself is designed to be simple:

- 5 • One text box to enter the proposed new compliance date.
- 6 • Upload fields for financial and operational documentation supporting the delay
- 7 request.

8 Ali Sumer reiterated that HCAI will respond to each application within 120 days of
9 submission, as required by the statute. He encouraged early submissions, noting that
10 while responses may be rapid during normal operations, mass last-minute submissions
11 may take the full review period.

12 Finally, Ali Sumer reiterated that compliance plan milestones will be tracked through the
13 same online portal for all facilities, but additional monitoring and accountability will apply
14 to those receiving a delay. These include:

- 15 • \$5,000 per day fines for deviations from the approved milestones.
- 16 • Delays in issuing permits if noncompliance is identified.

17 **Informational and Action Items:**

- 18 • AB 869 allows a three-year seismic compliance extension to January 1, 2033.
- 19 • Facilities must:
 - 20 ○ Submit NPC-5 reports by January 1, 2025.
 - 21 ○ Submit updated compliance plans by January 1, 2026.
 - 22 ○ Use the new automated portal to apply for delay extensions.
- 23 • PIN 80, released on March 4, 2025, provides step-by-step guidance.
- 24 • HCAI may approve additional two-year extensions after January 1, 2030, based
- 25 on future circumstances.
- 26 • Enforcement mechanisms include daily fines and permit holds for
- 27 noncompliance.
- 28 • Applications require documentation of financial hardship or external constraints.

29 **Committee and Public Comments:**

- 30 • Teresa Endres asked whether PIN 80 applies only to facilities requesting delay
- 31 under AB 869.

- Ali Sumer clarified that PIN 80 covers both standard compliance plans and delay applications. While the delay process applies only to a subset of facilities, all facilities are required to submit updated compliance plans.

9. Proposed Requirement for Amplification of Diaphragm Transfer Shears by W_0 and R_{upper}/R_{lower} in building when a Type 4 out-of-plane irregularity is triggered by a stiffness irregularity, using the Two-stage analysis procedure in ASCE 7

Facilitator: Roy Lobo, PhD, SE, Principal Structural Engineer, HCAI (or designee)

Discussion and Input:

Roy Lobo presented a highly technical proposal addressing how diaphragm transfer shears should be amplified in buildings that exhibit a Type 4 out-of-plane irregularity, particularly when such irregularities are triggered by stiffness discontinuities and evaluated using the two-stage analysis procedure from ASCE 7.

Roy Lobo explained that in many podium-type structures, where a flexible upper structure sits atop a stiff lower podium, the diaphragm often acts as a load transfer mechanism between the dissimilar systems. Current modeling and design practices may not sufficiently account for the amplification of diaphragm shears due to this stiffness discontinuity.

He proposed requiring that:

- Diaphragm transfer shears be amplified by the overstrength factor (W_0), and by the ratio of R_{upper} to R_{lower} , where R represents the response modification coefficient for the respective structural system.
- This approach ensures that diaphragm forces reflect the actual redistribution of loads between the two stages of structural systems in dual-response buildings.

Roy Lobo provided justification for the proposed changes based on:

- Nonlinear finite element analysis conducted on a 7-story building that exhibited this irregularity.
- The analysis demonstrated significant underestimation of diaphragm forces when these amplifications were not applied.
- By using the proposed amplification, engineers would better capture force redistribution effects and ensure safer, code-compliant designs.

He shared a summary of the technical study results, including visual outputs of the model showing:

- Force concentrations in the diaphragm under lateral load.
- Significant increase in diaphragm demands when considering stiffness, irregularities and dynamic amplification factors.
- Roy Lobo clarified that this proposed change would not apply to all buildings, but only to:
 - Structures using the two-stage analysis method.
 - Buildings triggering a Type 4 vertical irregularity based on stiffness contrast.
 - Diaphragms functioning as transfer elements between different structural systems.

He also highlighted that this issue is especially relevant in healthcare facility design, where mixed system configurations and performance-based designs are frequently used.

Roy Lobo concluded by recommending that the committee consider incorporating this requirement into California amendments to the 2025 California Building Code, specifically under the structural design provisions governing seismic load paths.

Informational and Action Items:

- Proposed requirement: Amplify diaphragm transfer shears by $W_0 \times (R_{\text{upper}}/R_{\text{lower}})$.
- Applies only to:
 - Structures using two-stage analysis.
 - Buildings exhibiting Type 4 out-of-plane vertical irregularities.
- Based on nonlinear analysis of a 7-story model demonstrating force underestimation in diaphragms.
- Proposal aims to improve seismic resilience and compliance with ASCE 7 modeling intent.
- HCAI will circulate the technical paper and model findings for review.

Committee and Public Comments:

- Several committee members acknowledged the complexity and specialized nature of the proposal.
- No specific objections or revisions were raised during the discussion.

- Jim Malley thanked Roy Lobo for the depth of analysis and clarity of the technical presentation, noting that this type of proposal reflects the committee’s critical responsibility in advancing seismic safety.

10. Proposed reduction of the Lower bound F_p force requirement for design of nonstructural components in base isolated hospital buildings

Facilitator: Roy Lobo, PhD, SE, Principal Structural Engineer, HCAI (or designee)

Discussion and Input:

Roy Lobo presented a proposal to revise the minimum seismic design force (F_p) requirement for nonstructural components located in base-isolated hospital buildings. He explained that current code requirements may overestimate the seismic demand on nonstructural elements in such systems, especially when compared to what dynamic analysis and actual performance suggest.

Roy Lobo began by providing context:

- The 2022 ASCE 7 Standard, adopted into the 2025 California Building Code, includes a lower-bound seismic force of $0.3 S_D S W_p$, where:
- S_D = design spectral acceleration.
- W_p = component weight.
- This lower bound is not scaled for base-isolated systems, meaning that force reductions from isolation are not recognized in the minimum values.

Roy Lobo explained that this can lead to over-conservative designs, unnecessary bracing, and increased cost for nonstructural systems—despite the known performance benefits of base isolation in reducing seismic floor accelerations.

To support the proposed reduction, Roy Lobo referenced:

- A nonlinear time-history analysis performed on an actual base-isolated hospital building.
- The analysis showed that peak floor accelerations and component responses in isolated structures were consistently lower than in fixed-base counterparts.
- The study included multiple ground motion records and variations in component anchorage locations (i.e., roof, mid-height, near base).

Roy Lobo recommended that for base-isolated hospital buildings, the minimum force requirement for nonstructural component anchorage be reduced from $0.3 S_D S$

W_p to 0.2 SDS W_p, recognizing the benefit of reduced seismic input from the isolation system.

He noted that this change would:

- Maintain safety by aligning more closely with expected seismic performance.
- Offer cost savings in system bracing and anchorage requirements.
- Provide consistency with performance-based design principles.

Roy Lobo emphasized that this proposal would apply only to:

- Buildings using base isolation per CBC Chapter 16.
- Anchored nonstructural components that meet detailing and attachment criteria.
- Not applicable to equipment on isolation platforms, which are governed by different provisions.

He recommended that this proposed amendment be added to the California amendments for the 2025 code cycle and circulated for public and industry review.

Informational and Action Items:

- Proposed reduction of minimum anchorage force from 0.3 SDS W_p to 0.2 SDS W_p for nonstructural components in base-isolated buildings.
- Based on nonlinear time-history analysis demonstrating reduced floor accelerations in isolated systems.
- Aims to reduce unnecessary design conservatism and construction cost.
- Proposal applies only to:
 - Base-isolated hospital buildings
 - Anchored nonstructural components
- Excludes equipment mounted on isolated platforms.

Committee and Public Comments:

- Jim Malley thanked Roy Lobo for the technical justification and acknowledged the potential benefit to hospital projects that use seismic isolation.
- He recommended that the full technical study be shared with stakeholders for transparency and evaluation.

1 **11. Proposed removal or revision of California Building Code exceptions to AISC**
2 **(American Institute of Steel Construction) design specifications**

3 **Facilitator:** Jim Malley, SE, Senior Principal Degenkolb Engineers, (or designee)

4 **Discussion and Input:**

5 Jim Malley presented a proposal to remove or revise certain California amendments to
6 the AISC design specifications that are currently embedded in the CBC. He explained
7 that many of these state-specific exceptions were added years ago and are now either
8 obsolete, redundant, or in conflict with updated AISC national standards and
9 methodologies.

10 Jim Malley identified specific examples of existing CBC exceptions that warrant review,
11 including:

- 12 • Legacy references that override provisions in the current AISC 360 and AISC
13 341 standards without offering clear justification.
- 14 • Exceptions that require additional detailing or analysis not consistent with current
15 performance-based or code-based design approaches.
- 16 • California-specific language that creates confusion among engineers submitting
17 plans across different jurisdictions.

18 He emphasized that removing or updating these exceptions would promote:

- 19 • Consistency between the California Building Code and nationally accepted AISC
20 design methods.
- 21 • Improved clarity for structural engineers and plan reviewers.
- 22 • Fewer errors or delays during plan check, especially for engineers unfamiliar with
23 California's unique amendments.

24 Jim Malley also pointed out that:

- 25 • The 2025 CBC already incorporates the latest AISC standards (including AISC
26 360-22 and AISC 341-22), which reflect decades of research, practical lessons,
27 and nationwide consensus. He noted that many of the older CBC exceptions
28 were removed in the last CBC update leaving just a few issues to be considered.
- 29 • By continuing to retain outdated or unnecessary exceptions, California may
30 inadvertently undermine the benefits of adopting modernized codes.

31 He proposed a systematic review of all current CBC exceptions to AISC specifications,
32 with the goal of:

- 33 1. Eliminating exceptions that are no longer justified.

2. Clarifying the application of exceptions that may still serve a specific purpose and consider suggesting that AISC adopt the CBC language.

3. Aligning California code language more closely with AISC format and terminology.

Jim Malley noted that HCAI staff would prepare a side-by-side matrix comparing current California exceptions with the relevant AISC provisions to facilitate this effort. The committee would then review each item in a future meeting or working group session.

Informational and Action Items:

- Proposed removal or revision of outdated or conflicting California-specific exceptions to AISC 360 and AISC 341.
- Goal is to:
 - Eliminate confusion and outdated references.
 - Promote code alignment and reduce unnecessary design hurdles.
- HCAI to prepare a comparative analysis matrix of CBC exceptions vs. AISC standard provisions.
- The topic will return for further committee discussion and possible action in a future meeting.

Committee and Public Comments:

- Roy Lobo expressed support for the review process and agreed that alignment with AISC national standards would benefit the broader engineering community.
- Jim Malley reaffirmed the importance of transparency and consensus in the review, especially given the historical context behind some of the exceptions.
- No other committee members voiced objections or concerns.

12. Comments from the Public/Committee Members on Issues not on this Agenda

Facilitator: Jim Malley (or designee)

Discussion and Input:

Jim Malley opened the floor for comments from both the committee members and the public regarding topics not listed on the current meeting agenda. He reminded attendees that while no formal discussion or action could be taken on off-agenda items during the meeting, these items could be considered for placement on a future agenda, in accordance with Government Code §§ 11125 and 11125.7(a).

Committee and Public Comments:

- Jim Malley thanked committee members for their engagement and noted the value of maintaining an open channel for future input.
- Jim Malley acknowledged the public's continued interest and participation in the regulatory process and encouraged stakeholders to submit topics for future consideration through the appropriate HCAI contact channels.

13. Adjournment

Jim Malley noted that several items discussed—particularly proposed structural code amendments—would return for further review or action in future meetings. He encouraged committee members to stay engaged and to begin reviewing materials that would be circulated in the coming months, including the matrix of AISC exceptions and supporting studies on seismic force modifications.

He also acknowledged the efforts of HCAI staff, particularly those responsible for launching the new seismic compliance portal and supporting documentation such as PIN 80 and Advisory Guide A-13.

Jim Malley officially adjourned the meeting at approximately 1:00 p.m.

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Codes and Processes Committee

Draft Meeting Report/Minutes

May 7, 2025

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2020 West El Camino Avenue, Suite 800
Sacramento, CA 95833
hcai.ca.gov



Hospital Building Safety Board Codes and Processes Committee

Wednesday, May 7, 2024
10:00 a.m. – 4:00 p.m.

Locations:

2020 West El Camino Ave, Conference Room 930, Sacramento, CA 95833
355 South Grand Avenue, Conference Room 2000, Los Angeles, CA 90071

Committee Members Present

Michael O'Connor, Committee Chair
Cody Bartley
Louise Belair
Jennifer Cox
Michael L. Davis
Gary Dunger
Teresa Endres
Jim Malley
Carl Newth

Consulting Members Present

Kelly Martinez
Belinda Young

HCAI Staff Present

Chris Tokas, Deputy Director
Arash Altoontash
Richard Tannahill
Brett Beekman
Larry Enright
Joe Labrie
Roy Lobo
Mia Marvelli
Diana Navarro
Jamie Schnick
Camille Dixon

HBSB Staff Present

Veronica Yuke, Executive Director
Marcus Palmer
Evet Torres

1. **Call to Order and Welcome**

- 2 **Facilitator:** Michael O'Connor, Principal, Nichols, Melburg & Rossetto; Committee
- 3 Chair

1 Michael O'Connor officially called the meeting to order at 10:00 a.m. on May 7,
2 2025. He welcomed attendees to the Hospital Building Safety Board Codes and
3 Processes Committee meeting and then turned the floor over to Veronica Yuke for
4 the roll call and advisories.

6 **2. Roll Call and Meeting Advisories/Expectations**

7 **Facilitator:** Veronica Yuke, Supervisor, HCAI; Executive Director
8

9 Veronica Yuke conducted roll call, confirming the presence of committee members
10 and HCAI staff. A quorum was established. She emphasized that all HCAI staff and
11 committee members must identify themselves before speaking and described the
12 roll-call method for voting.

14 **3. Update on Electronic Test, Inspection, and Observation (eTIO)**

15 **Facilitator:** Joe LaBrie, Regional Compliance Officer (on behalf of Chris Davis, SE,
16 HCAI)

17 **Discussion and Input:**

18 Joe LaBrie presented an update on the development of the eTIO system. He
19 explained that internal and public beta testing had occurred, and issues were being
20 resolved. A controlled summer beta rollout for small- to mid-sized projects was
21 planned. The team aimed to complete a major milestone by May 9, 2025. Joe
22 emphasized the intent to fine-tune the platform before applying it to larger-scale
23 projects.

24 **Committee and Public Comments:**

- 25 • Cody Bartley inquired about the types of projects targeted for beta testing and
26 offered DPR's current projects as candidates.
- 27 • Joe LaBrie welcomed board members' participation and confirmed a
28 preference for smaller projects to ensure a manageable and informative
29 rollout.
- 30 • Michael O'Connor supported the continuation of beta testing involving board
31 projects to enhance familiarity and expectations.

32 **Informational & Action Items:**

- 33 • Identify beta test project candidates.
- 34 • Solicit board member engagement for testing.

- Proceed with summer pilot launch for select projects.

4. Standard Details Update

Facilitator: Gary Dunger, Executive Director, Design and Construction, Cedars-Sinai Health System

Discussion and Input:

Gary Dunger shared an overview of new and previously drafted standard detail drawings, noting a delay due to his Revit expert being on family leave. He introduced a new set of wood-frame construction details—provided by Michael O'Connor—that required committee feedback. These included wall backing, door/window infills, slip mechanisms, and structural elements like headers and joist connections.

- Michael O'Connor clarified the goal: develop details applicable for typical construction cases (especially non-structural) while avoiding complications from seismic or fire code conflicts. He acknowledged context-sensitive issues in structural applications and emphasized caution.
- Chris Tokas suggested that proprietary hardware like Simpson clips should be referenced by performance characteristics only, avoiding specific brand names.
- Jamie Schnick supported this, citing prior similar treatment for partition detailing.
- Gary Dunger noted potential complications from building fire ratings and clarified that current details do not incorporate fire resistance.

Committee and Public Comments:

- Brett Beekman advised greater clarity on load considerations and proposed limiting the applicability of certain header tables unless fully contextualized.
- Roy Lobo recommended reviewing structural details under new 2025 CBC requirements (ASCE 7-22) and volunteered to assist.
- Belinda Young raised concerns about rigid size specifications in the drawings and suggested the use of ranges or "minimum/maximum" language to maintain flexibility.
- Michael O'Connor and Gary Dunger affirmed plans to genericize the designs for broader applicability and to add cautionary notes on structural assumptions.
- Bob Lyons asked if the standard details applied strictly to non-bearing walls. Michael O'Connor confirmed this was the intent.

- A chat message (read by Veronica Yuke) recommended including stud notching details and using "maximum/minimum" formatting for dimensions.
- Gary Dunger agreed and said this was already under consideration.

Informational and Action Items:

- Submit reviewed standard detail package to Evett Torres for distribution.
- Assign Brett Beekman to participate in future review of structural details.
- Add item to October 22, 2025. Structural/Non-Structural Committee meeting agenda.
- Clarify and enhance drawings per committee input.

5. 2025 Intervening Code Cycle Update and Timeline

Facilitator: Mia Marvelli, Architect and Supervisor, HCAI

Discussion and Input:

Mia Marvelli provided a comprehensive update on the upcoming 2025 Intervening Code Cycle and outlined target milestones:

- Internal review by July 2025
- Final submission to CBSC by December 1, 2025
- Effective implementation in July 2028
- She reviewed key code areas under revision:
 - Primary Care Clinics (SB 1382)
 - Alternative Birthing Clinics (ABCs)
 - Behavioral Health/Crisis Stabilization Units
 - Chemical Dependency Recovery Hospitals (AB 2376)

She summarized recent stakeholder engagements, public meetings, and interagency collaboration with CDPH, DSA, and State Fire Marshal.

Committee and Public Comments:

- Teresa Endres asked about the qualifications of the CPCA advisory committee.
 - Mia Marvelli and Richard Tannahill confirmed it includes architects, operators, and experienced designers.

- Michael O'Connor asked whether the Title 24–Title 22–FGI comparison table would be publicly available.
 - Mia Marvelli confirmed it would be shared before the June 12 public meeting.
- Chris Tokas emphasized this regulatory moment as an opportunity to “right-size” requirements, differentiating between clinical facility types.
- A member of the public inquired about the unclear regulatory boundaries between medical labs and clinics.
 - Mia Marvelli acknowledged the gray area and welcomed collaborative input.

Informational and Action Items:

- Host a public meeting on June 12, 2025, to discuss clinic regulations.
- Continue refining scope for code changes and guidance materials.
- Maintain coordination with CPCA, CDPH, and other agencies.

6. Comments from the Public/Committee Members on Issues Not on the Agenda

Facilitator: Michael O'Connor

Discussion and Input:

Michael O'Connor opened the floor for comments unrelated to the formal agenda. One chat suggestion from the public encouraged inclusion of construction stud notching guidelines.

Committee and Public Comments:

- Gary Dunger confirmed this comment aligned with current planning for detailed inclusion.

Informational and Action Items:

- Suggestions to be reviewed for future agenda inclusion.

7. Adjournment

Michael O'Connor thanked all participants and officially adjourned the meeting at 11:39 a.m.

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Education and Outreach Committee

Draft Meeting Reports/Minutes

February 13, 2025

April 23, 2025

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2020 West El Camino Avenue, Suite 800
Sacramento, CA 95833
hcai.ca.gov



Hospital Building Safety Board Education and Outreach Committee

**February 13, 2025
10:00 a.m. – 4:00 p.m.**

Locations:

2020 West El Camino Ave, Conference Room 930, Sacramento, CA 95833
355 South Grand Avenue, Conference Room 1901, Los Angeles, CA 90071

Committee Members Present

Scott Mackey, Committee Chair
Louise Belair
Janice Cheung
Michael Davis
Gary Dunger
Teresa Endres
Jim Malley

Consulting Members Present

Kelly Martinez
Bruce Rainey
Belinda Young
Bill Zellmer

Ex-Officio Members Present

Jennifer Thornburg

HCAI Staff Present

Chris Tokas
Richard Tannahill
Monica Colosi
Darren Graves
Joe LaBrie
Mia Marvelli
Jamie Schnick
Nanci Timmins
Andia Farzaneh

HBSB Staff Present

Veronica Yuke, Executive Director
Marcus Palmer
Evet Torres

1 **1. Call to Order and Welcome**

2 **Facilitator:** Scott Mackey, AIA, NCARB, APEC, Healthcare Design Consultant,
3 Committee Chair (or designee)

4 Scott Mackey called the meeting to order at 10:02 a.m.

6 **2. Roll Call and Meeting Advisories/Expectations**

7 **Facilitator:** Veronica Yuke, Executive Director

8 Veronica Yuke welcomed everyone to the meeting and conducted a roll call,
9 confirming a quorum. She then outlined the Rules of Engagement for all
10 attendees, both in-person and virtual.

12 **3. Item #11 Update on the development of future Educational Programs.**

13 **Facilitator:** Scott Mackey (or designee)

14 Scott Mackey announced the adjustment in the meeting agenda, moving item 11
15 up and shifting all other items down by one position.

16 **11A: Classification of imaging procedures into Class 1, 2, and 3.**

17 Mia Marvelli provided a brief update on the classification of imaging procedures,
18 confirming that Eric Jacobson is still working on it alongside CDPH.

19 **Discussion and input:**

- 20 • Scott Mackey asked for a potential timeline for action on the imaging
21 procedure classification.
- 22 • Chris Tokas mentioned that the timeline for action is the second quarter
23 of this year.
- 24 • Scott Mackey thanked the committee members for the update.

25 **11B: Tips on how to work with HCAI in the field.**

26 **Discussion and input:**

- 27 • Mia Marvelli stated that there was no update on working with HCAI in the
28 field and asked if anyone else had any information.

29 Scott Mackey tabled the discussion for the next meeting and moved on to the
30 next agenda sub-item.

11C: How to write a Functional Program and Operational Program and how to make it easy for CDPH to approve.

Facilitator(s): Kelly Martinez, Teresa Endres

Kelly Martinez introduced the sub-item with the update that they are working on a PowerPoint presentation about how to write a functional program advisory guide. She described the structure of the guide, including an introduction, table of contents, acronyms, definitions, and examples.

She further explained that the guide is being designed to help facilities to develop a functional program with all the required elements in a format that is concise and easy to understand.

Kelly Martinez noted that the guide includes references to Title 24 and Title 22 regulations, as well as various advisory guides including for the pharmacy, the psychiatric unit, nutritional and dietary themes, and additional resources such as CANs and PINs. She added that it also includes a checklist that the user can fill out themselves, with examples to support the process.

Discussion and input:

- Scott Mackey asked if the checklist is specific to OSHPD, CDPH, or a combination of both.
- Kelly Martinez responded that the checklist is for the California administrative Code and covers operations, communication plans, and required elements for both OSHPD and CDPH.
- Kelly Martinez discussed including helpful hints in the guide, such as for the functional programs for pharmacy, dietetics, imaging rooms, and more, and encouraged feedback on additional topics. She also explained that the guide will include content on mobile units, floor plans, compliance diagrams, inpatient and outpatient workflows, construction project phasing, licensing considerations, and changes in function.
- Kelly Martinez provided the timeline for the project, aiming to have it solidified by the end of the month, with a goal to present it to CDPH on March 15th and to the committee for approval by April 23rd, and then to post it to the website by October 1st.
- Teresa Endres thanked Kelly Martinez for organizing the project, and Clara Wu and Mia Marvelli for their work in finalizing the guide's outline.
- Scott Mackey asked for clarification around whether the document was to be published rather than presented as a webinar.
- Kelly Martinez suggested that the guide could be opened to a webinar presentation if the team decides to, but as it stands, the document will be finalized for publication only by October.

- Scott Mackey suggested that the guide's publication be followed by a webinar to allow for questions from people who have reviewed it, allowing for additional assistance where needed.
- Teresa Endres agreed that a webinar would be helpful, particularly to manage expectations regarding the length of functional programs, such as for CT equipment replacements.

11D: Develop a formal design-professional mentorship program with HCAI.

Facilitators: Kelly Martinez and Teresa Endres

Teresa Endres acknowledged the new topic and committed to working on it after finalizing the functional program guide.

Discussion and input:

- Scott Mackey stated the importance of identifying Chris Tokas' goals for the mentorship program and creating a starting outline.
- Kelly Martinez agreed with the need for Chris Tokas to provide input to help guide the direction of the mentorship program.
- Chris Tokas mentioned that the mentorship program started last summer with the CAP certification program and expressed a willingness to work on a more detailed agenda for the program.
- Scott Mackey asked if there were any other comments or questions regarding the mentorship program and it was confirmed that the program would continue to develop.

11E: Initiate the planning of a 2025 educational seminar.

Facilitators: Scott Mackey and Jim Malley

Scott Mackey said that at the end of the previous year, they talked about the organization's budget and what funding might be available in order to continue with the webinars and seminars. He then asked Chris for a report back on the opportunities in 2025 to hold both webinars and seminars that will be allowed and funded by the budget.

Discussion and input:

- Chris Tokas discussed the complexity of organizing physical seminars versus webinars and expressed a need for budget clarity before proceeding with the seminar planning. He said his advice to the Committee is to put the agenda together, including what they want to bring in, and that he will know more about the budget by June.
- Scott Mackey suggested that September 2025 would be the best time for the seminar and acknowledged the complexity of planning around budget approval. He welcomed the committee members to provide their input.

- Chris Tokas agreed and emphasized the need to continue moving forward, but also to wait for the budget update in late May or June.
- Jim Malley suggested moving forward with seminar planning, including developing a topic and agenda, even before the final budget approval.
- Scott Mackey agreed and said that there are a number of items they are putting together as a group, and that in addition to the seminars they are also considering input from the public. He emphasized that the committee should prepare a proposal for the seminar in order to present it when ready.
- Jim Malley asked about the timeline for locking down seminar dates and locations.
- Veronica Yuke acknowledged that the planning timeline is tight and that they would need to discuss contracts with Chris due to the budget constraints.

11F: Extend the outreach program to educate the public on the difference between HCAI and OSHPD.

Facilitators: Teresa Endres and Richard Tannahill

Teresa Endres introduced the idea of a "Hospital Building Safety Board Roadshow", as a way to educate the public on the differences between HCAI and OSHPD and provide an opportunity to meet OSHPD staff and encourage networking.

Teresa Endres presented a slide on the contents of the roadshow, including organizational charts, facility design and development, and the role of HCAI, as well as OSHPD's responsibilities.

Discussion & Public Input:

- Mia Marvelli suggested adding a slide showing how people can get involved with the roadshow.
- Scott Mackey agreed that including an invitation to attend meetings, both in person and virtually, would be helpful.
- Teresa Endres confirmed that the updated slides would include links to upcoming meetings and highlight any vacancies on the board to encourage public participation.
- Louise Belair suggested adding a slide about how to get involved in OSHPD's activities.
- Scott Mackey asked if Teresa could share which groups have seen the presentation so far.
- Teresa Endres mentioned that they had done activities which were successful. A test run with the Academy of Architecture for Health was

completed, and they had plans to present to more organizations, including to other AIA chapters.

- Scott Mackey asked if the AIA chapter focus was the only target group for outreach.
- Teresa Endres confirmed that in their efforts to make the roadshow successful, they were targeting other organizations, and that there are plans for further expert presentations, teaming up with CIA in their efforts towards reaching beyond AIA.
- Scott Mackey suggested that board members could recommend organizations that might benefit from the presentation.
- Teresa Endres explained that the goal was to refine the presentation through the AIA before extending the invitation to other organizations.

4. Item #3: Coordination and cooperation with the Instrumentation Committee to develop webinars, workshops and other educational opportunities to advance utilization of Structural Health Monitoring by Hospitals using seismic instrumentation.

Facilitator: Courtney B. Johnson, PG, CEG, Principal Geologist, Slate Geotechnical Consultants, Board Member (or designee)

Martin Hudson introduced himself as a member of the Instrumentation committee and started presenting slides on seismic instrumentation.

Scott Mackey thanked Martin for presenting in-person.

Martin Hudson presented the white paper report prepared by the Instrumentation Committee, touching on usefulness and benefits of seismic instrumentation. Overall, the presentation focused on a status report, benefits, the maximizing of efficiencies in instrumentation, data processing, and result transmission, as well as results for outreach to educate hospital owners on its importance. He added that after an earthquake, people look at the building and wonder if it is safe.

He said that in recent earthquakes, due to tremors caused by the earthquake, the committee has seen hospitals abandon packing procedures because of minor damage, and people typically struggle to differentiate between structural and non-structural damage. He mentioned instrumentation allows people to get an assessment on the condition of the building where it is installed. He also included that the committee's current objective is to connect with stakeholders, a term which is inclusive of facility staff, emergency responders, decision makers, professional engineers, the scientific community and the interested members of the public.

1 Martin Hudson then said that the committee is building upon the topic of the 2023
2 instrumentation white paper on seismic instrumentation and data processing, as
3 well as structural health monitoring. He said that they need the expertise of the
4 Education and Outreach committee in order to accomplish their objectives.

5 **Discussion and input:**

- 6 • Scott Mackey suggested that the data recorded from these systems could
7 help other stakeholders prepare for potential impacts from an earthquake
8 by sharing information. He emphasized that the benefits of the
9 instrumentation program should be explained clearly to stakeholders,
10 especially regarding data sharing after an event, so as to encourage
11 them to implement it. He added that they can even explore whether AI
12 could be helpful to the system. He also added that the committee should
13 share the potential costs as well.
- 14 • Kelly Martinez expressed the need for information regarding the permit
15 implications for installing seismic instrumentation and how long that
16 process would take.
- 17 • Bill Zellmer asked if there is already a list of facilities with instrumentation.
- 18 • Chris Tokas directed him to the facilities webpage, where details about
19 instrumentation in facilities can be found.
- 20 • Martin Hudson clarified that not all facilities have instrumentation, and
21 those with instrumentation have different levels of installation, with some
22 being more advanced than others.
- 23 • Jim Malley added that there's an official program for instrumentation
24 through CGS and OSHPD and discussed how private facilities could
25 independently pursue instrumentation for their buildings.
- 26 • Chris Tokas discussed the types of instruments available, from basic to
27 more advanced systems, and shared some of the ongoing discussions in
28 the instrumentation committee about tailoring the program for each
29 facility.
- 30 • Jim Malley suggested engaging with someone experienced in
31 earthquakes in Turkey to gain some insight to share with the public.
- 32 • Bruce Rainey raised questions about how building owners with existing
33 instruments could upgrade or expand their systems, what the costs would
34 be, and/or what the future cost of upgrading might be. He also inquired
35 about who makes those decisions.
- 36 • Martin Hudson explained that the goal is to create a system that provides
37 quick and reliable assessment data without the need for human
38 intervention.

- 1 ● Bruce Rainey raised further concerns about who would have the authority
2 to make evacuation decisions based on the instrumentation system's
3 data.
- 4 ● Martin Hudson clarified that instrumentation is not intended to replace
5 professional evaluations, but to provide preliminary information that can
6 assist those onsite in deciding whether there is need to evacuate. He
7 added that the system will not replace the need for red tags during an
8 evacuation procedure. He asked Jim Malley for input, who described
9 instrumentation as a helpful tool in deciding on interventions before
10 jumping to evacuation.
- 11 ● Chris Tokas said that one of the considerations that occupants have
12 during seismic activity is whether they need to get out of the building they
13 are in and whether it is safe, as such questions are natural thoughts for
14 humans to have before, during, and after an earthquake.
- 15 ● Scott Mackey asked when a webinar about seismic instrumentation
16 would be available.
- 17 ● Martin Hudson responded that he is not sure when exactly the webinar
18 will likely be available, but that he is visualizing a period of within a year,
19 following more coordination between the Instrumentation and Education
20 committees, and that timelines will be part of the agenda..
- 21 ● Scott Mackey opened the floor for further comments and questions about
22 the instrumentation webinar from community members.
- 23 ● Scott Mackey encouraged progress on the webinar, and informed Martin
24 Hudson that the presentation was a great start. He urged him to continue
25 preparing the agenda ready for a meeting that would take place within the
26 year.
- 27 ● Martin Hudson stated that the Instrumentation Committee would begin
28 refining the webinar content according to the feedback received.
- 29 ● Jim Malley suggested asking Wendy Bohan from CGS to share her
30 thoughts about outreach efforts and how they could collaborate with
31 OSHDP on making videos.
- 32 ● Wendy Bohan from CGS offered to collaborate on creating short-form
33 videos on the importance of the proposals of the white paper to be
34 included in the webinar for the public to understand the importance of the
35 information, and said that the videos will not exceed a total of 3 minutes.
- 36 ● Scott Mackey thanked Wendy Bohan and expressed enthusiasm about
37 partnering with other agencies and integrating their materials into the
38 presentation.

- Martin Hudson agreed that short introductory videos would help build interest and attract attendees to the full webinar.
- Scott Mackey liked the idea of using video trailers to get people excited about the webinar. He asked if there were any other questions or feedback from the public. He also added that he looks forward to the instrumentation committee getting back and partnering with them. He thanked everyone and emphasized the importance of teamwork ahead of the next steps for continuing the development of the webinar.

5. Item #4: Update on the Policy Intent Notice (PIN) 50 - Integrated Review Webinar.

Facilitator: Gary Dunger, Supervisor, HCAI (or designee).

Gary Dunger reported that the webinar that was held on September 25th had over 550 logins, conservatively estimating around 1,000 attendees. The feedback was very positive, and many indicated they would recommend the training to others. He had no updates on any requests for additional training sessions but added that they are ready if needed.

Discussion and input:

- Scott Mackey expressed satisfaction with the outcome of the webinar and opened the floor to any questions or comments regarding PIN 50 of the Integrated Review.
- Mia Marvelli mentioned that the PIN 50 document is in its final review stages and will be published before the next education and outreach meeting.
- Scott Mackey asked if the updates to the PIN justify another webinar or if the content is self-explanatory and can be reviewed individually by those interested.
- Mia Marvelli responded that the updates do not necessitate another webinar.
- Scott Mackey thanked Mia for the update and confirmed the content will be posted online.
- Teresa Endres asked if the webinar is available on the website.
- Scott Mackey confirmed they would check the availability of the webinar link on the website. He asked if there were any further questions from staff or the public.
- Mia Marvelli mentioned that the webinar link still shows as "coming soon" and said that they would investigate why it hasn't been linked yet.

- Scott Mackey confirmed that the webinar was recorded and said that the relevant team just needed to get the link posted. He reiterated that the link would be posted soon and thanked Diana Navarro and Gary Dunger for their work on the webinar.

6. Item #5: Follow up from the Preapproved Fabricated Components and Systems webinar held on June 25, 2024

Facilitator: Scott Mackey (or designee)

Scott Mackey reported that the Preapproved Fabricated Components webinar was well attended, and that they will ensure that the video link is posted. He said there was a public request for a follow-up session to address questions on the process and procedure, and on where inspections take place.

Discussion and input:

- Chris Tokas acknowledged the importance of continuing the momentum on this topic, emphasizing that more questions will always arise as new systems are fabricated.
- Teresa Endres asked if the questions for the follow-up were coming from the chat or direct outreach and suggested pulling questions from various sources.
- Scott Mackey confirmed that the questions were coming from a variety of sources, and that there was a lot of confusion on the process. He added that a 'Part B' session could be helpful to clarify everything. He proposed that the follow-up could be integrated into the agenda for an in-person seminar to facilitate more direct interaction.

Scott Mackey closed the discussion on a Part B or follow-up session to the pre-approved fabricated components webinar and confirmed that it will remain on the agenda for the next meeting with an update on defining the session's contents.

7. Item #6: Update on the Inspect-to-Pass Approach to Field Inspections Webinar Development Subcommittee.

Facilitator: Michael Davis, CHI, Senior Consultant, Davis HBC, Inc., Committee Member (or designee)

Michael Davis shared the update that the previous objectives still stand, with meetings scheduled for 2/27, 3/27, and 4/24. He reported that the goal for these meetings is to review material from each subcommittee, refine the process, and to add case studies by 4/24, aiming for a presentation by the end of the year.

1 **Discussion and input:**

- 2 • Scott Mackey inquired about the possibility of finalizing a name for the
- 3 webinar and opened the discussion for input.
- 4 • Monica Colosi proposed several renaming options for the webinar:
- 5 Collaborative Inspection Approach, Proactive Inspection Philosophy,
- 6 Project Centric Inspection, and Compliance Focused Inspection. She
- 7 suggested "Collaborative Inspection Approach" as a good fit.
- 8 • Scott Mackey asked if a vote was necessary to finalize the name or if it
- 9 could be agreed upon informally.
- 10 • Veronica Yuke clarified that the name of the webinar could be decided
- 11 without a vote.
- 12 • Scott Mackey agreed with Monica Colosi's suggestion and opened the
- 13 floor for further discussion.
- 14 • Michael Davis expressed a preference for "Collaborative Inspection
- 15 Approach" and "Project Centric Inspection," emphasizing the title's focus
- 16 on the project's success.
- 17 • Michael Davis questioned whether to keep "Inspect to Pass" as part of
- 18 the title, supporting the shift in focus to that of the "Collaborative
- 19 Inspection Approach."
- 20 • Chris Tokas agreed with keeping "Inspect to Pass" as part of the
- 21 discussion due to its strong association with the inspection process and
- 22 its role in compliance but acknowledged it may not need to be in the title.
- 23 • Monica Colosi explained that the entire process is collaborative, from
- 24 design to construction to inspection, and that "Inspect to Pass" aligns with
- 25 the collaboration but should not be the title.
- 26 • Scott Mackey agreed that the collaborative approach should be the main
- 27 focus, as long as the webinar still acknowledged the "Inspect to Pass"
- 28 concept even though it will no longer be part of the title.
- 29 • Scott Mackey thanked Monica Colosi and asked for any further questions
- 30 or comments from staff.

31 **Public Comments:**

- 32 • Todd Davis, a member of the public, supported the title change, pointing
- 33 out the "CIA" acronym (Collaborative Inspection Approach) and
- 34 suggesting that "Inspect to Pass" terminology could still be incorporated
- 35 throughout the presentation.
- 36 • Scott Mackey confirmed that there is no motion needed for the new CIA
- 37 title and moved forward with the update.

- Scott Mackey thanked the public for their comments, agreeing that the title "Collaborative Inspection Approach" effectively conveys the team's collaboration approach rather than emphasizing the pressure of passing.

8. Item #7: Update on PINs, CANS, and Advisory Guides.

Facilitator: Mia Marvelli, Architect, Supervisor, HCAI (or designee)

Mia Marvelli provided an update, mentioning several upcoming webinars, including one on the "Small and Rural Hospital Relief Program" scheduled for February 20th, focusing on seismic resiliency and eligibility for grants. She encouraged attendees to share this information with their networks.

Chris Tokas agreed with Mia Marvelli, emphasizing the importance of promoting the compliance seminar and encouraging attendance.

Mia Marvelli moved on to updates about the recently published guidance. She discussed the revised "Nurse Stations CAN," which clarifies the location and size of units, especially regarding new A2L refrigerants. She also mentioned updates to "PIN 74" related to power sources and life-saving equipment, as well as "PIN 51" on pre-approved details, which clarifies the requirements for stamping and signing for design professionals.

She continued with the updates, mentioning the release of PIN 78 (Fire pump automatic switches), PIN 79, and advisory guides related to the electrical code for fire pump stations and tier four generators. She also updated attendees on the release of future advisory guide programs. First is guide A4, regarding acute site hospital requirements and other items related to weather protection for interior gypsum board. Then, Advisory Guide A6 for alternate sources of power to maintain safe temperatures. Advisory Guide A13 for the NPC Upgrade construction process for existing ceilings will follow, and finally, Advisory Guide A13 will be for weather protection for interior Gypsum Wallboard.

Discussion and input:

- Scott Mackey asked if "CAN 102" would be absorbed into the new advisory guide, and Mia Marvelli confirmed that the CAN would be replaced by the guide.
- A public member asked if OSFM agrees with the generator-related guidance.
- Mia Marvelli responded, confirming that outreach had occurred, but she wasn't certain about full agreement.
- Scott Mackey suggested following up with OSFM to confirm their concurrence on the generator issue.

1 **9. Item #8: Update on a Program Flex Unit collaboration with California**
2 **Department of Public Health (CDPH).**

3 **Facilitator:** Scott Mackey (or designee)

4 Scott Mackey moved on to Item #8, acknowledging that the collaboration was still
5 in progress due to changes on CDPH's side.

6 **Discussion and input:**

- 7 • Mia Marvelli provided a minor update, explaining that CDPH had acquired
8 a new program manager, and that communication was ongoing, but that
9 there was still uncertainty about the direction of the collaboration due to
10 the change.
- 11 • Kelly Martinez suggested that program flexibility should be part of the
12 functional program advisory guide, which could be submitted to CDPH for
13 feedback. She also recommended involving CDPH in the webinar for
14 better collaboration.
- 15 • Mia Marvelli agreed with Kelly Martinez, stating that some aspects of the
16 Program Flex Unit overlap with AMCs and functional programs.
- 17 • Scott Mackey emphasized the importance of ensuring that information is
18 effectively communicated and that all stakeholders are involved in the
19 process. He recommended tracking and evaluating the Program Flex Unit
20 opportunity.

22 **10. Item #9 Update on exploring the opportunity to develop a Small and Rural**
23 **Hospital Relief Program webinar.**

24 **Facilitator:** Scott Mackey (or designee)

25 **Discussion and input:**

- 26 • Mia Marvelli suggested putting a report out on seismic compliance
27 webinars and the AB 869 regulations in time for the next meeting.
- 28 • Chris Tokas added that the webinars would explain how smaller hospitals
29 can comply with AB 869 and use the funding available for seismic
30 compliance.
- 31 • Scott Mackey requested regular financial updates on the program, such
32 as who is benefiting and whether there are any surpluses or shortages of
33 funds.
- 34 • Chris Tokas confirmed that the webinars would cover the financial
35 aspect, including how the available funds can be utilized to achieve
36 seismic compliance as quickly as possible.

11. **Item #10: Update on the creation of a Sustainability Guide for dealing with extreme natural hazard events.**

Facilitator: Scott Mackey (or designee)

Scott Mackey introduced Item #10, discussing the creation of a subcommittee to come up with a sustainability guide for dealing with extreme natural disaster events, including topics like air quality, fire, self-sustaining utilities, and storage. He sought volunteers for a subcommittee to focus on these issues.

Discussion and input:

- Bruce Rainey pointed out that the focus seemed to be more on resilience than sustainability, as the term "sustainability" is often associated with broader goals.
- Scott Mackey agreed, acknowledging the need to address the issue of extreme events and help facilities deal with their impacts without focusing on climate change. He emphasized the broader scope of issues such as fire, which destroys the community.
- Louise Belair volunteered for the subcommittee.
- Scott Mackey welcomed her and clarified that they do not have a timeline while the project is in its early stages but repeated the growing importance of addressing these issues.
- Chris Tokas explained that efforts around power independence, such as microgrids and electrified facilities, are already in progress to ensure that healthcare facilities remain operational during extreme weather events like fires or PSPSs (Public Safety Power Shutoffs).
- Mia Marvelli suggested a review of the existing "Planning and Preparing for Disasters" guide and updating it if necessary, rather than creating a new document from scratch.
- Teresa Endres added that most of the required standards were already covered in the existing guide, which includes advice for dealing with wildfires, air quality, HVAC systems, and pandemics. She recommended sharing the guide through outreach efforts such as webinars.
- Scott Mackey echoed that even with the existing disaster guide, it is important to do outreach to ensure that the information reaches the right people. He suggested a webinar to present the guide's findings.
- Teresa Endres said that talks began about the emergency disaster guide in 2017, and that there is a chapter on pandemics and a chapter on wildfire. She said they had involved experts at the time, but if someone were to go through it and find that something is lacking then it should be addressed.

- Louise Belair said that if the guide already exists then she doesn't want to change anything.
- Scott Mackey said that if the material does exist, outreach such as a webinar would be beneficial so that as many people as possible are made aware of the available materials.
- Louse Belair suggested reviewing the latest research on air filtration, as new studies may provide additional insights into air quality during extreme events.
- Kelly Martinez added that hospitals are required to conduct hazard vulnerability assessments (HVAs) and that the guide could support them by offering tools and real-world examples, particularly for common California disasters like fires and earthquakes.
- Chris Tokas highlighted the work being done with microgrids, reporting that they are part of the future of resilient hospital design, ensuring that healthcare facilities can operate regardless of their traditional power vulnerabilities during emergencies.
- Scott Mackey proposed retitling the initiative to "Designing for Resilience" and focusing on resources like the disaster guides and the concept of island hospitals (facilities that generate their own power) as part of the resilience strategy.
- Mia Marvelli confirmed that the idea of creating independent and resilient hospital designs was already in progress, particularly through the use of microgrids and on-site power generation.
- Scott Mackey decided to leave this item on the agenda, retitled "Designing for Resilience", and said that he would revisit it in the next meeting.

12. Item #12: Comments from the Public/Committee Members on Issues not on this Agenda.

Facilitator: Scott Mackey (or designee)

Scott Mackey opened the floor for final comments from the public, committee members, or staff on unrelated topics and there were no comments.

13. Item #13: Adjournment.

Scott Mackey adjourned the meeting at 12:49 p.m.

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hcai.ca.gov



Hospital Building Safety Board Education and Outreach Committee

April 23, 2025
10:00 a.m. – 4:00 p.m.

Locations:

2020 West El Camino Ave, Conference Room 930, Sacramento, CA 95833
355 South Grand Avenue, Conference Room 1901, Los Angeles, CA 90071

Committee Members Present

Cody Bartley, Vice-Chair
Louise Belair
Gary Dunger
Teresa Endres
Courtney Johnson
Jim Malley

HCAI Staff Present

Chris Tokas
Arah Altoonash
Mia Marvelli
Jamie Schnick
Nanci Timmins
Andria Farzaneh

Consulting Members Present

Belinda Young
Bill Zellmer

HBSB Staff Present

Veronica Yuke, Executive Director
Marcus Palmer
Evet Torres

- 1
- 2 **1. Call to Order and Welcome**
- 3 **Facilitator:** Scott Mackey, AIA, NCARB, APEC, Healthcare Design Consultant,
- 4 Committee Chair (or designee)
- 5 Cody Bartley officially called the meeting to order on April 23, 2025, at 10:00 AM.
- 6

1 **2. Roll Call and Meeting Advisories/Expectations**

2 **Facilitator:** Veronica Yuke, Executive Director

3 Veronica Yuke welcomed everyone to the meeting conducted roll call and
4 establishing a quorum. She then outlined the Rules of Engagement for all
5 attendees, both in-person and virtual.

6 Veronica Yuke urged members not to leave as there were action items requiring
7 votes.

8
9 **3. Review and approve the draft February 13, 2025, meeting report/minutes**

10 **Facilitator:** Scott Mackey, Chair (or designee)

11 **Discussion and input:**

12 Cody Bartley introduced the agenda item and requested a motion to approve the
13 draft minutes from the February 13, 2025, meeting of the Education and
14 Outreach Committee. He briefly noted that the minutes had been previously
15 distributed for review.

16 **Committee and Public Comments:**

- 17
 - No comments were offered during this agenda item

18 **Informational and Action Items:**

19 The committee confirmed that there were no edits or amendments required.

20 **Voting:**

- 21
 - **Motion:** Jim Malley moved to approve the draft February 13, 2025,
22 Education and Outreach Committee meeting report/minutes as written.
 - **Second:** Teresa Endres
 - **Vote:** Unanimous approval through voice vote.
 - **Action Item:** The committee approved the draft February 13, 2025,
26 Education and Outreach Committee meeting report/minutes as written.

27
28 **4. Coordination and cooperation with the Instrumentation Committee to**
29 **develop webinars, workshops, and other educational opportunities to**
30 **advance utilization of Structural Health Monitoring by hospitals using**
31 **seismic instrumentation.⁹**

32 **Facilitator:** Courtney B. Johnson, PG, CEG, Principal Geologist, Slate
33 Geotechnical Consultants, Board Member (or designee)
34

Discussion and Input:

Courtney Johnson opened the discussion by presenting an expanded outline for a webinar being developed in coordination with the Instrumentation Committee. She stated that the outline evolved from the Committee's February 13, 2025, meeting and reflected feedback from that session. She explained that the webinar would cover the benefits and applications of structural health monitoring and seismic instrumentation in hospitals. Courtney Johnson emphasized that seismic instrumentation could identify weaknesses in both structural and nonstructural systems before an earthquake, deliver critical real-time data immediately after an event, and record structural responses during the earthquake.

Courtney Johnson further noted that these tools could support site-level decision-making regarding evacuations or continued operation and would aid post-event inspections by helping identify likely damage zones. She highlighted the importance of grouped or shared data across facilities, enabling better system-wide analysis and benchmarking. She also discussed balancing instrumentation system selection with data transmission and processing capabilities, and she introduced funding pathways, including state programs through CGS and OSHPD and private options. Courtney Johnson emphasized that the goal was not to replace physical inspections but to supplement them and provide faster, more informed assessments.

Committee and Public Comments:

- Jim Malley asked when the Instrumentation Committee was scheduled to meet again. Courtney Johnson responded that the next formal meeting was not until October, which was why she proposed using the upcoming June Full Board meeting as a venue for further discussion. Jim Malley suggested two options: convene a focused conversation at the Full Board meeting or establish a subcommittee in advance.
- Veronica Yuke agreed that the June meeting would be an ideal opportunity to facilitate input from both the Education and Outreach Committee and the Instrumentation Committee, given their mutual involvement. Chris Tokas also supported using the Full Board meeting to continue coordination, citing resource availability post-July 1.
- Courtney Johnson asked for input on advertising methods. She cited earlier feedback from CGS recommending short promotional videos and urged the group to start working toward defined communication timelines. She also questioned whether a subcommittee should be formed to accelerate development.

- Cody Bartley stated that forming a subcommittee would be a logical next step if the committee wanted to move forward efficiently. He proposed using the June Full Board meeting to solicit interest from board members willing to participate.

Informational and Action Items:

- Courtney Johnson and the Education and Outreach Committee will present the seismic instrumentation webinar plan at the June Full Board meeting to explore the formation of a subcommittee.
- The committee will evaluate the need to form a dedicated subcommittee for content development and coordination with the Instrumentation Committee.
- Potential future promotional tools, including video shorts, will be considered in partnership with CGS and other stakeholders.
- Planning will include identifying appropriate timelines and audiences for outreach.
- Courtney Johnson will continue refining the webinar outline and exploring opportunities for broader committee involvement.

5. Discuss the Preapproved Fabricated Components and Systems webinar – Part 2 event

Facilitator: Cody Bartley, DPR Construction (or designee)

Discussion and Input

Cody Bartley introduced the agenda item by reflecting on the success of the first webinar on Preapproved Fabricated Components and Systems. He stated that the event drew high attendance and generated substantial interest but also revealed persistent confusion among participants about regulatory processes and technical expectations. Cody Bartley explained that many questions raised during the webinar had already been addressed in the presentation, indicating a need to reinforce the core content and clarify lingering uncertainties.

Cody Bartley invited the committee to provide direction on the development of Part 2 of the webinar. He asked whether the focus should remain on reinforcing key messages or expand to include advanced content such as real-world case studies and detailed technical lessons.

Committee and Public Comments:

- Teresa Endres responded by emphasizing the importance of presenting lessons learned from recent projects. She suggested that Part 2 should move beyond the conceptual framework of preapproved fabrication and focus instead on practical experiences. She proposed showcasing multiple projects, including both successful and problematic implementations, to help industry professionals understand the common pitfalls and best practices.
- Belinda Young offered to contribute insights from her ongoing work on a prefab project in Roseville. She indicated that with approval from project stakeholders, she could provide detailed accounts of their experience. She stated that there were “plenty of stories to be told” and that many of the lessons could be generalized for future use.
- Chris Tokas shifted the conversation toward developing a “how-to” document instead of or in addition to a second webinar. He argued that a formal white paper or advisory guide would provide lasting value and support for stakeholders. He proposed organizing the content around major topics such as fabrication techniques, inspection protocols, and regulatory compliance.
- Cody Bartley agreed and stated that people learn differently. He pointed out that while some benefit from webinars, others might prefer reading a structured, step-by-step document at their own pace. He suggested that written guidance could enhance clarity on issues such as inspection responsibilities and timeline expectations.
- Jamie Schnick proposed incorporating all unanswered webinar questions into a FAQ-style attachment for the white paper, so future readers can see responses to prior audience inquiries.
- Bill Zellmer voiced strong support for the idea of promoting prefab systems. He shared that early messaging in the industry was that prefab “doesn’t work,” but this view had shifted to “this works pretty well.” Bill Zellmer encouraged the committee to continue educating the public to help remove stigma and increase adoption.

Informational and Action Items:

- The committee agreed to deprioritize a second webinar in favor of drafting a white paper or “how-to” advisory guide on preapproved fabricated components and systems.

- The white paper will include:
 - Regulatory process overviews.
 - Case studies of successful and challenging projects.
 - Frequently asked questions from the previous webinar.
 - Clarification on timelines, approvals, and inspection requirements.
- Belinda Young will explore contributing content based on the Roseville project.
- Cody Bartley proposed using the June Full Board meeting to solicit additional contributors and define roles for white paper development.
- The committee tentatively agreed to target a draft version by the end of 2025, understanding that it would be a living document that could evolve.

6. Update from the Collaborative Inspection Approach to Field Inspections Webinar Development Subcommittee

Facilitator: Cody Bartley, Vice Chair, DPR Construction (on behalf of Michael Davis, CHI, Senior Consultant, Davis HBC, Inc.)

Discussion and Input

Cody Bartley provided the update on behalf of Michael Davis, who was absent. He reported that the Collaborative Inspection Approach subcommittee had convened twice since the February 13, 2025, Education and Outreach Committee meeting. Cody Bartley stated that the group had made a great deal of progress and had finalized the framework and flow for the upcoming webinar.

He explained that the webinar is being structured to present the inspection process through the lens of various key stakeholders, including:

- Owner
- Design Professional of Record
- Contractor
- Inspector of Record
- Testing Lab
- OSHPD Field Staff

1 Each stakeholder's role will be addressed to demonstrate how collaborative
2 inspection practices can improve project outcomes and compliance with
3 approved construction documents.

4 Cody Bartley noted that the subcommittee had intended to begin PowerPoint
5 development but admitted that this aspect had progressed slower than
6 anticipated. Nevertheless, he expressed optimism that the group would regroup
7 during the next scheduled meeting on April 24, 2025, and continue momentum.

8 **Committee and Public Comments:**

- 9 • Chris Tokas praised the subcommittee's work. He expressed
10 confidence that the webinar would fill a critical gap in the construction
11 industry's understanding of quality assurance and code compliance.
- 12 • Chris Tokas further envisioned the webinar becoming a national model
13 for construction quality assurance, emphasizing that successful
14 building performance depends not only on the quality of design but
15 also on whether the building is constructed in compliance with
16 approved plans and regulatory expectations.
- 17 • Jim Malley asked whether there was a projected timeline for delivery of
18 the webinar. Cody Bartley responded that the group would likely need
19 three to four more months to complete the webinar content and
20 presentation materials.
- 21 • Chris Tokas added that budget considerations for in-person seminars
22 or hybrid formats would become clearer after July 1, 2025. He
23 suggested that the committee initially launch the project as a webinar
24 but keep the option open for a seminar or in-person delivery at a later
25 time.

26 **Informational and Action Items:**

- 27 • The subcommittee will meet again on April 24, 2025, to review and
28 advance PowerPoint development.
- 29 • The current focus remains on stakeholder perspectives and clearly
30 outlining responsibilities to encourage collaborative inspections.
- 31 • Committee members will:
 - 32 ○ Finalize PowerPoint slides.
 - 33 ○ Schedule a tentative rollout date (webinar projected in 3–4
34 months).

- Cody Bartley and Chris Tokas will revisit options for seminar delivery based on budget availability post–July 1, 2025.
- The subcommittee will continue incorporating feedback and refining messaging.

7. Update on How to Write a Functional Program and Operational Program, and How to Make it Easy for CDPH to Approve

Facilitator: Mia Marvelli, Architect, Supervisor, HCAI; and Clara Wu, Compliance Officer, HCAI (or designee)

Discussion and Input

Mia Marvelli introduced Clara Wu, who presented a detailed update on the development of the Functional Program Advisory Guide. Clara Wu explained that the guide was designed to help facilities create clear, code-compliant functional and operational programs to ease CDPH approval. She walked through the document's structure, which includes:

- Code references and regulatory citations (Title 24 and Title 22)
- Terminology and acronyms
- Submission instructions
- Helpful hints
- A CAC 7-119 checklist
- Five anonymized example projects:
 - New acute care hospital
 - Acute psychiatric hospital
 - Skilled nursing facility
 - Remodel project
 - Nuclear medicine room

Clara Wu stressed that functional programs should be concise and project-specific, not overly lengthy. She added that the guide covers topics such as when to separate programs (e.g., pharmacy, dietary), working with mobile units, addressing psychiatric units, construction phasing, and distinguishing between AMC and CDPH Flex.

She provided the following development timeline:

- Drafted in late 2024 by the subcommittee and BSU

- Reviewed in February 2025
- Submitted to CDPH on March 28, 2025
- Feedback due April 23, 2025 (meeting date)
- Final comments due from committee members by May 15, 2025
- Target posting date: October 1, 2025

Committee and Public Comments:

- Teresa Endres expressed full support and praised the effort.
- Mia Marvelli noted that Kelly Martinez was absent but had previously contributed to the guide.
- Bill Zellmer stated he had not yet fully reviewed the emailed copy but expressed appreciation for the examples shown in the presentation. He raised a question about whether the guide relied solely on tables or also supported narrative formats.
- Clara Wu clarified that the examples reflect multiple formats, and that the committee is not prescribing one uniform method. Mia Marvelli reiterated that the guide includes both narrative and table-based examples and that the goal is flexibility while maintaining clarity and efficiency.
- Bill Zellmer added that many architectural teams rely on their medical planning consultants to write functional programs, and those professionals often struggle with what to include. He stated that the guide would be very helpful in clarifying expectations.
- Chris Tokas emphasized the importance of keeping functional programs concise, stating that lengthy and unfocused submissions delay review. He explained that the goal of the advisory guide is to accelerate CDPH and OSHPD review processes by ensuring alignment from the beginning.

Informational and Action Items

- Committee members are to submit comments on the guide by May 15, 2025.
- The Building Standards Unit will incorporate those comments and finalize the guide for posting by October 1, 2025.
- The finalized version will not return to the committee unless substantial revisions are proposed.

- The guide will remain dynamic, with updates made as needed.
- HCAI will consider using the guide as a foundation for a future webinar on how to write a compliant functional program.

Voting

- **Motion:** Jim Malley moved to approve the draft Functional Program Advisory Guide with the understanding that additional comments may be submitted by May 15, 2025.
- **Second:** Courtney Johnson
- **Vote:** Unanimous approval via roll call vote.
- **Action Item:** The committee approved the draft Functional Program Advisory Guide for finalization and public release, pending additional edits by May 15, 2025.

8. Update on the creation of a “Designing for Resilience” webinar subcommittee for dealing with extreme natural hazard events

Facilitator: Scott Mackey (or designee)

Discussion and Input

Cody Bartley opened the item by summarizing the purpose of the proposed subcommittee: to explore and promote hospital design strategies for resilience in the face of extreme natural hazards. He listed initial topics for the webinar, which would include:

- Power independence
- Air quality concerns (especially due to wildfire smoke)
- Wildfire protection strategies
- Hazard Vulnerability Assessments (HVAs)
- Island Hospitals (facilities capable of operating independently during disaster events)

Cody Bartley stated that the formal creation of the subcommittee would be postponed until the June Full Board meeting to allow for broader participation. He requested feedback from committee members on the proposed structure and scope.

Committee and Public Comments:

- Teresa Endres raised a foundational concern about how the committee was defining the term “resilience.” She noted that it may carry different meanings depending on professional background—for example, medical planners may interpret it differently from structural engineers. She suggested clarifying this definition early in the process so that expectations are aligned.
- Chris Tokas acknowledged Teresa Endres’ point and provided a working definition. He stated that resilience in the context of hospital infrastructure refers to a facility’s ability to remain functional during and after any adverse event, whether caused by power shutdowns, wildfires, or earthquakes. Chris Tokas emphasized that since 2018, Public Safety Power Shutoffs (PSPS) have become common, and hospitals must reduce dependency on external systems, particularly on diesel generators.
- Chris Tokas referenced UC Irvine (UCI)’s new microgrid system as a best-in-class example of energy resilience. He highlighted that while the upfront investment was significant, UCI estimated a three-year return on investment, which made the project both economically and operationally justifiable.
- Teresa Endres agreed and recommended that the UCI project be included as a case study in the proposed webinar or educational materials. She noted that many stakeholders remain unaware of the project’s details and lessons.
- Chris Tokas added that he and Jamie Schnick had attended the ribbon-cutting for what is now the largest microgrid system in the U.S., describing it as a model of hospital resiliency. He reiterated his long-term vision of creating "Island Hospitals" that are fully independent in terms of water, power, and fuel.
- Cody Bartley affirmed the importance of balancing resilience with cost and affordability. He stressed that the economic feasibility of design features must be considered alongside performance benefits to ensure scalable implementation.

Informational and Action Items

- The committee will defer formal creation of the Designing for Resilience subcommittee until the June Full Board meeting.

- At that meeting, the board will:
 - Define the subcommittee's mission and structure.
 - Identify members from a variety of backgrounds (e.g., engineers, planners, facility managers).
- The UCI microgrid system will be evaluated as a case study for inclusion in educational outreach.
- Definitions of resilience and its operational, structural, and financial dimensions will be established at the onset of subcommittee work.
- The committee agreed by consensus to add formal subcommittee creation to the June 2025 Full Board meeting agenda.

9. Comments from the Public/Committee Members on Issues not on this Agenda

Facilitator: Scott Mackey (or designee)

Cody Bartley introduced the item and invited committee members and members of the public to raise any comments, concerns, or suggestions related to future agenda items or issues not formally listed in the current meeting.

Committee and Public Comments:

- Teresa Endres suggested that after the Functional Program Advisory Guide is finalized, the committee should consider following up with an educational webinar. She stated that a webinar would help industry professionals better understand how to apply the guide's recommendations and examples in real-world scenarios.
- Chris Tokas supported Teresa Endres' suggestion. He stated that once the advisory guide is posted, the Department would be able to develop and deliver a webinar to provide further clarification and industry outreach. He reiterated that a finalized product like the guide provides a strong foundation for education and implementation.

Informational and Action Items:

- The committee expressed interest in creating a webinar based on the Functional Program Advisory Guide once finalized.
- HCAI staff will evaluate the timeline and resources for developing the associated educational session after the guide's release.

10. Adjournment.

Cody Bartley adjourned the meeting at 11:01 AM.

“Collaborative Inspection Approach to Field Inspections” (formerly “Inspect-to-Pass”) Webinar Development Subcommittee of the Education and Outreach Committee

Draft Meeting Reports/Minutes

February 27, 2025

March 27, 2025

April 27, 2025

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**Hospital Building Safety Board
 Collaborative Inspection Approach to Field Inspections
 (formerly, "Inspect-to-Pass Approach to Field Inspections")
 Webinar Development Subcommittee
 of the Education and Outreach Committee**

**February 27, 2025
 10:00 a.m. – 4:00 p.m.**

Locations:

2020 West El Camino Ave, Conference Room 930, Sacramento, CA 95833
 355 South Grand Avenue, Conference Room 1901, Los Angeles, CA 90071

Subcommittee Members Present

Michael Davis, Subcommittee Chair
 Bert Hurlbut
 Scott Mackey

HCAI Staff Present

Chris Tokas
 Richard Tannahill
 Monica Colosi
 Joe LaBrie
 Andia Farzaneh

HBSB Staff Present

Veronica Yuke, Executive Director
 Marcus Palmer
 Evett Torres

- 1 **1. Call to Order and Welcome**
- 2 **Facilitator:** Michael Davis, CHI, CEO Emeritus, DavisHBC, Inc.; Subcommittee
- 3 Chair (or designee)
- 4 Michael Davis called the meeting to order at 10:00 a.m. He welcomed attendees
- 5 and acknowledged the transition from the "Inspect-to-Pass" concept to a broader
- 6 "Collaborative Inspection Approach."

2. Roll Call and Meeting Advisories/Expectations

Facilitator: Veronica Yuke, Manager, HCAI; Executive Director (or designee)

Veronica Yuke welcomed everyone to the meeting, conducted a roll call, and confirmed a quorum. She noted that remote attendance does not count toward quorum.

3. Progress review of the current presentation outline subsections

Facilitator: Michael Davis (or designee)

Michael Davis introduced the item and began by restating the content development assignments from the prior subcommittee meeting:

- Michael Davis: Inspector of Record (IOR) and Testing Lab
- Gary Dunger: Ownership
- Scott Mackey: Design Professional of Record
- Cody Bartley: Contractor and Subcontractors
- Monica Colosi (presenter) and Joe LaBrie: OSHPD and Field Staff

Michael Davis explained that he will present a format that all presenters can follow. He outlined four discussion points:

1. What the collaborative inspection approach means to the role.
2. Why it matters.
3. How the role demonstrates it.
4. What the common obstacles are and how to overcome them.

Michael Davis began his content for IOR and Testing Lab. He said the IOR must proactively collaborate with contractors and design professionals to ensure first-time inspection success and code compliance. He stressed the IOR cannot operate in isolation. He emphasized that the IOR cannot act as a lone decision-maker and must avoid weaponizing inspections.

Michael Davis stated that the IOR is not the interpreter of the drawings—under Title 24, Part 1, that is the responsibility of the architect. He gave examples of when IORs failed to collaborate, including IORs who turned inspections into competitions to find the biggest problem each day and another who openly stated “I don’t trust architects” during a team meeting. He noted that the IOR must be part of a collaborative effort, not a separate authority.

He identified three key obstacles: Inexperienced contractors, Absent or disengaged design professionals, and Owners pressuring the IOR to accept noncompliant work.

Discussion and Public Input:

- Michael Davis said he will use real project examples in his presentation and asks for feedback from the subcommittee.
- Scott Mackey supported the structure and presentation but pointed out that the Testing Lab role needs more attention. He encouraged Michael Davis to include specific examples of testing lab contributions and challenges.
- Bert Hurlbut recommended opening and closing the presentation with benefits for the owner. He said the collaborative approach leads to better quality, fewer delays, and successful inspections—and that owners ultimately reap the rewards.
- Michael Davis agreed. He called it a “sandwich structure”: benefits up front and at the end, technical content in between.
- Scott Mackey confirmed he will use that model in his introduction. He plans to cover project and owner benefits, project cost impacts, the definition of a successful inspection, and the importance of shared responsibility.
- Joe LaBrie asked whether the presentation should explicitly include what happens when teams don’t collaborate—delays, cost overruns, bad relationships.
- Scott Mackey responded that real examples will cover those outcomes without needing a negative section. He wants to avoid leading with consequences and prefers to keep the message positive.
- Michael Davis agreed and shared two real examples. In the first, two IORs created a contest to outdo each other in identifying project issues, which poisoned the culture and resulted in both being removed. In the second, an IOR’s statement about mistrusting architects directly contradicted their role under the architect’s direction. He said these cases highlight the need for a reset in expectations.
- Michael Davis transitioned to the second bullet point: the order in which the webinar content will be presented.
- Scott Mackey said his section on the Design Professional of Record currently comes first. He said he plans to deliver the introduction and set the tone for the webinar by discussing ownership and project benefits, cost implications, and the collaborative roles of all parties.
- Michael Davis said he originally placed the design professional first based on Chris Tokas’ earlier comments about the design professional’s

1 responsibility for overall project success. But he noted that owners initiate
2 the process and suggested revisiting the presentation sequence.

- 3 • Bert Hurlbut asked about the target audience for the webinar. He wanted
4 to clarify whether it's mostly IORs or a broader stakeholder mix.
- 5 • Chris Tokas explained that if only IORs attend, the subcommittee has
6 failed. He compared construction to manufacturing and noted the key
7 difference is that construction projects have separate parties for design,
8 construction, and oversight. He added that the owner delegates
9 responsibility to the design professional and that the design professional
10 must remain engaged through completion. He emphasized that the
11 architect or engineer of record holds statutory authority and cannot hand
12 it off.
- 13 • Joe LaBrie agreed but raised a challenge. He said some owners are
14 disengaged and only want a completed facility. In those cases, pressure
15 is placed on design professionals to approve substandard work, and too
16 often they comply. He called for a paradigm shift—he wants design
17 professionals to stop accommodating and start leading. He said doing
18 things “the way we’ve always done them” no longer works.
- 19 • Monica Colosi suggested the presentation should start with Ownership.
20 She explained that every role on a project exists because the owner
21 initiates the project. She agreed with presenting the owner’s perspective
22 first and supported holding additional webinars tailored to specific roles.
- 23 • Scott Mackey agreed and said he’ll thank the owner in his section for
24 hiring the right professionals and emphasize the design professional’s
25 leadership role. He said design professionals must act as the “captain of
26 the team” and lead with strength, not just compliance.
- 27 • Chris Tokas supported that point, quoting Steve Jobs: “Your job is not to
28 be easy on people; your job is to make them better.” He said even in
29 design-build, the responsibility still rests with the design professional.
- 30 • Joe LaBrie said these conversations are difficult but necessary. He
31 supported having them.
- 32 • Michael Davis proposed a new presentation order based on project
33 workflow: Ownership, Design Professional of Record, Contractor,
34 Inspector of Record / Testing Lab, and OSHPD Field Staff.
- 35 • Scott Mackey agreed with the new order. He said it followed the actual
36 sequence of a construction project.
- 37 • Joe LaBrie said that although the regulations put authority in the hands of
38 the design professional, in reality, many projects give control to the

1 contractor. He said architects must reassert their authority when this
2 happens.

- 3 • Chris Tokas agreed and stated that OSHPD cannot perform its role
4 without the IOR. He reminded the subcommittee that Title 24 and statute
5 require the architect or engineer of record to maintain regulatory
6 responsibility throughout the construction process.

7 **Informational and Action Items**

8 ***Informational:***

- 9 • Michael Davis shared his plan to apply a consistent four-question
10 structure to all presentation segments.
- 11 • Scott Mackey, Bert Hurlbut, Monica Colosi, and Joe LaBrie each
12 expressed support for the revised presentation order.
- 13 • Scott Mackey confirmed he would focus the introduction on defining
14 success and value to owners.
- 15 • Michael Davis agreed to revise the IOR section to include more robust
16 Testing Lab content based on feedback from Scott Mackey.
- 17 • Joe LaBrie's point about the consequences was acknowledged and will
18 be integrated through storytelling, not as a standalone topic.

19 ***Action:***

- 20 • Michael Davis will revise the presentation outline to reflect the new
21 workflow-based presentation order.
- 22 • Michael Davis will revise his assigned content on the Inspector of Record
23 / Testing Lab to include expanded discussion of the Testing Lab, based
24 on feedback from Scott Mackey.
- 25 • Scott Mackey will develop the introduction and the section on the Design
26 Professional of Record using the four-question structure and the
27 "sandwich" format emphasizing project and owner benefits.
- 28 • Michael Davis, Scott Mackey, Gary Dunger, Cody Bartley, Monica Colosi
29 will continue refining their sections using the agreed structure, with
30 illustrative examples, and be prepared to present updates at a future
31 subcommittee meeting.

32 **Voting:**

33 There was no formal roll-call vote under this subsection. However, an informal
34 consensus was reached on:

- 35 • The proposed content structure for each role
- 36 • A positive tone focused on collaboration and success

- Inclusion of benefits in the introduction and conclusion
- Integration of obstacles and failures through real-world examples

No objections were raised. The subcommittee reached a unanimous consensus to proceed using this format.

Subcommittee and Public Comments

- Scott Mackey committed to delivering an opening that defines successful collaboration and emphasizes the leadership role of the design professional.
- Bert Hurlbut reinforced that ownership should come first and that the presentation must show how the collaborative approach benefits owners.
- Joe LaBrie pushed for stronger engagement by design professionals and a break from passive practices.
- Monica Colosi advocated for prioritizing the owner's role and supports exploring future webinars tailored to individual project roles.
- Chris Tokas closed by reaffirming that architects and engineers bear the statutory responsibility for the built facility, regardless of delivery method.

4. Plan for future meetings and practice sessions

Facilitator: Michael Davis (or designee)

Discussion and input:

- Michael Davis introduced the item and opened the floor to discussion on how the subcommittee should proceed with preparing content for future meetings and potential practice sessions.
- Michael Davis stated that he would follow up by sharing the updated outline reflecting the revised presentation order discussed under Item #3. He asked whether subcommittee members felt they had sufficient foundation from today's discussion to begin fleshing out their respective sections.
- Scott Mackey responded that he had what he needed and planned to further develop his section. He stated that he would focus on the "why" behind the collaborative inspection approach and continue building the Design Professional of Record content in alignment with the four-question structure.
- Michael Davis asked if the subcommittee would like to review refined content at the next meeting or wait until final drafts were ready.

1 Scott Mackey suggested that sharing incremental progress would be
2 beneficial. He said that early feedback from the subcommittee would help
3 strengthen the final product and ensure alignment across all sections.

- 4 • Monica Colosi agreed with Scott Mackey and supported using the next
5 meeting for feedback and content refinement. She emphasized that real-
6 time input from other subcommittee members would help each presenter
7 address potential gaps or missed perspectives.
- 8 • Joe LaBrie stated that he looked forward to seeing how each section
9 evolved and agreed with presenting rough drafts at the next meeting. He
10 expressed confidence in the subcommittee's direction and said that
11 continued dialogue would improve the final result.
- 12 • Michael Davis confirmed that the subcommittee would aim to review early
13 drafts during the next meeting. He stated that he would update and
14 distribute the outline prior to that meeting, giving everyone a chance to
15 align their content with the revised structure.
- 16 • Michael Davis reminded presenters that while final formatting could wait,
17 each section should now begin moving toward complete content,
18 incorporating the agreed messaging structure and tone.

19 **Informational and Action items**

20 ***Informational***

- 21 • Michael Davis confirmed he would share the revised outline with the new
22 presentation order before the next meeting.
- 23 • Subcommittee members agreed that they would present and review draft
24 content at the next meeting for feedback and refinement.
- 25 • Presenters agreed to continue using the four-question structure and to
26 align messaging across sections.

27 ***Action***

- 28 • Michael Davis will update and circulate the presentation outline reflecting
29 the revised structure.
- 30 • Michael Davis, Gary Dunger, Scott Mackey, Cody Bartley, and Monica
31 Colosi will each prepare draft versions of their assigned presentation
32 sections to share at the next subcommittee meeting.
- 33 • Joe LaBrie will continue to support content development for the OSHPD
34 and Field Staff section.
- 35 • Michael Davis will schedule the next meeting to allow time for content
36 review, discussion, and refinement.

Subcommittee and Public Comments

- Scott Mackey stated that early feedback would be valuable and confirmed he would present a draft of his content at the next meeting.
- Monica Colosi expressed support for collaborative refinement and emphasized the benefit of group input during development.
- Joe LaBrie encouraged continued collaboration and said the process was moving in a positive direction.

5. Comments from the Public/Subcommittee Members on Issues not on this Agenda

Facilitator: Michael Davis (or designee)

Michael Davis opened Agenda Item #5 and invited comments from members of the public and subcommittee members regarding any issues not listed on the meeting agenda.

Discussion and input:

- Joe LaBrie raised a concern about how statutory and regulatory roles assigned to design professionals are often overridden in practice. He explained that although the building code places regulatory authority with the architect and engineer of record, many projects operate as if contractors are in charge. He described this as a widespread industry problem and stated that design professionals often fail to assert their authority, which leads to diminished oversight and compromises to quality.
- Joe LaBrie emphasized that subcommittee members should recognize and address this dynamic in the webinar. He stressed that the webinar should not just promote collaboration but also encourage design professionals to reclaim their leadership role, as required by law.
- Chris Tokas responded in agreement. He stated that the design professional has the legal responsibility for the project from beginning to end. He referenced Title 24 and statutory language, confirming that this authority cannot be delegated to a contractor. Chris Tokas stated that OSHP is depending on the design professional to remain actively engaged throughout the construction process. He affirmed that this is not optional — it is a matter of regulatory compliance.
- Chris Tokas added that although contractors may lead construction activities, they cannot assume the authority or responsibility that legally

1 belongs to the design professional. He stressed that the architect or
2 engineer of record must ensure that the finished building conforms to the
3 approved design and applicable codes.

- 4 • Monica Colosi stated that while today's meeting included discussion from
5 multiple stakeholder perspectives, the subcommittee may consider
6 holding additional webinars focused on specific roles. She suggested that
7 more role-specific educational content could further support collaboration
8 and clarity.
- 9 • Michael Davis acknowledged the comments and stated that these ideas
10 would be noted for possible inclusion in future meeting agendas or
11 educational initiatives.

12 **Informational and Action Items**

13 ***Informational***

- 14 • Joe LaBrie highlighted a persistent industry issue in which contractors are
15 treated as the de facto authority on projects, despite the code placing
16 responsibility with the design professional of record.
- 17 • Chris Tokas confirmed that this issue is a violation of statutory and
18 regulatory requirements. He restated that the design professional holds
19 non-delegable responsibility for project compliance under Title 24.
- 20 • Monica Colosi proposed developing role-specific webinars to further
21 address the needs of distinct stakeholder groups and support
22 collaborative practices.

23 ***Action***

- 24 • No formal action items were assigned during this agenda item, but
25 Michael Davis acknowledged the suggestions and stated they would be
26 considered for future subcommittee agendas or initiatives.

27 **Subcommittee and Public Comments**

- 28 • Joe LaBrie urged the subcommittee to use the webinar as an opportunity
29 to encourage design professionals to reassert their leadership.
- 30 • Chris Tokas reiterated that statutory authority belongs to the design
31 professional, not the contractor, and affirmed the regulatory obligation for
32 active oversight.
- 33 • Monica Colosi encouraged developing additional, role-specific webinars
34 to deepen engagement and support educational outreach.

1 **6. Adjournment**

2 Michael Davis adjourned the meeting at 11:39 a.m.



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**Hospital Building Safety Board
Collaborative Inspection Approach to Field Inspections
Webinar Development Subcommittee
of the Education and Outreach Committee**

**March 27, 2025
10:00 a.m. – 4:00 p.m.**

Locations:

2020 West El Camino Ave, Conference Room 930, Sacramento, CA 95833
355 South Grand Avenue, Conference Room 1901, Los Angeles, CA 90071

Subcommittee Members Present

Michael Davis, Subcommittee Chair
Cody Bartley, Subcommittee Vice Chair
Gary Dunger
Bert Hurlbut
Scott Mackey

HCAI Staff Present

Chris Tokas
Arash Altoontash
Richard Tannahill
Monica Colosi
Joe LaBrie
Andia Farzaneh

HBSB Staff Present

Veronica Yuke, Executive Director
Marcus Palmer
Evelt Torres

1 **1. Call to Order and Welcome**

2 **Facilitator:** Michael Davis, CHI, CEO Emeritus, DavisHBC, Inc.; Subcommittee
3 Chair (or designee)

4 Michael Davis opened the meeting at 10:00 a.m. and welcomed all attendees to
5 the Collaborative Inspection Approach to Field Inspections Subcommittee. He
6 noted that this session builds on prior meetings and serves as a mid-
7 development checkpoint to refine the content of the presentation that will
8 ultimately be delivered in a public webinar.

9
10 **2. Roll Call and Meeting Advisories/Expectations**

11 **Facilitator:** Veronica Yuke, Manager, HCAI; Executive Director (or designee)

12 Veronica Yuke welcomed everyone to the meeting and conducted a roll call, and
13 confirmed a quorum. She reviewed virtual meeting protocols, instructions for
14 public comment, and the use of roll call for all voting matters.

15
16 **3. Progress review of the current presentation outline subsections**

17 **Facilitator:** Michael Davis (or designee)

18 The subcommittee reviewed draft content for five subsections of the
19 presentation, as organized by project role.

20 **Discussion & Public Input**

21 **Item #3a: Ownership - Gary Dunger**

- 22 • Gary Dunger acknowledged limited prior involvement but committed to
23 actively developing the ownership section going forward.
- 24 • Michael Davis encouraged all subcommittee members to contribute ideas
25 to any section by submitting material to HBSB support staff for
26 centralized dissemination.
- 27 • Bert Hurlbut stressed that the owner sets the tone for the inspection
28 program and must contractually embed expectations for collaboration,
29 performance, and quality.
- 30 • Chris Tokas added that the building code expects owners to drive QA/QC
31 and that even sophisticated owners need guidance from the design team.
- 32 • Bert Hurlbut illustrated successful owner involvement using UCLA and
33 Stanford steel inspection protocols, where pre-approved tags streamlined
34 jobsite inspections.

- Michael Davis supported this as a compelling presentation example and emphasized early owner buy-in as foundational to success.
- Scott Mackey noted that inexperienced owners often need their architects to act as educators and stewards during the process.

Informational and Action Items

- Michael Davis introduced the phrase “Hire to Pass” as a working title for the ownership section, part of a proposed theme aligning each role with its project accountability.
- All members were encouraged to submit ideas for ownership, even if not directly assigned to the section.

Subcommittee Comments

- Joe LaBrie endorsed the slogan concept and emphasized keeping messaging accessible and memorable.

Public Comments

None.

Item #3b. Design Professional of Record (DPOR) – Scott Mackey

Discussion & Public Input

- Scott Mackey outlined his draft content, centered on the DPOR’s responsibility to lead the project from concept through construction completion.
- He emphasized the architect as “team captain”, tasked with defining the vision, managing expectations, and collaborating with contractors, inspectors, and owners.
- Key subsections included: team collaboration model, maintaining design integrity, problem solving through obstacles, code adherence, and active presence during construction.
- Scott proposed evolving “OAC” meetings into “OACI” meetings, integrating Inspectors of Record (IORs) as formal participants.
- He encouraged the DPOR role to include ongoing constructability review, not just upfront design.

Informational and Action Items

- Michael Davis introduced the theme phrase “Design to Pass”.
- Scott committed to clarifying who comprises the DPOR “team” and building out visual support materials.

Subcommittee Comments

- Bert Hurlbut noted the DPOR must also serve as arbiter of their own drawings when disputes arise.
- Chris Tokas affirmed that liability and final authority rest with the design team.
- Michael Davis commented that engaged DPORs dramatically improve inspection outcomes, but their field presence is often reduced when CA phase fees are cut.
- Scott Mackey stated that DPOR engagement must intensify during construction, not taper off.

Public Comment

None.

Item #3c. Contractor of Record / Subcontractor - Cody Bartley

Discussion & Public Input

- Cody Bartley framed his content under “Build to Pass”, focusing on the contractor’s quality control (QC) program and role in collaborative inspection.
- He outlined how internal QC procedures—signoffs by subcontractors and general contractors—must precede IOR inspection.
- Cody emphasized open dialogue with inspectors and DPORs as key to avoiding failed inspections and construction delays.
- He provided a real-world example of improperly installed screw heads missed during early inspections that led to significant rework.
- Cody advocated for QC checklists, pre-installation field reviews, and IOR-partnered mentorship to elevate subcontractor awareness and job readiness.

Informational and Action Items

- Cody to include QC checklist examples and visuals in presentation development.
- Michael Davis reiterated the impact of pre-cons, mockups, and trade coordination meetings as critical contractor contributions to successful inspections.

Subcommittee Comments

- Bert Hurlbut noted large contractors often hire former IORs to lead QA/QC teams.

- Michael Davis supported the idea of experienced IORs mentoring young contractor staff as a practical alternative for mid-size projects.
- Scott Mackey praised Cody's points and emphasized the value of contractors offering value-engineered solutions or alternatives during the build phase.
- Cody noted that design documents must be reviewed early for constructability, especially on medium or small projects.

Public Comments

None.

Item #3d. Inspector of Record / Testing Lab - Michael Davis

Discussion and Input

- Michael Davis shared his refined content outline centered around "Inspect to Pass".
- He focused on shaping the inspector's mindset, collaboration habits, and communication style.
- He emphasized that inspectors must be proactive, not reactive, and engage with all team members.
- The IOR's role was discussed across three phases:
 1. Pre-Construction: Attend early meetings, clarify inspection processes.
 2. Construction: Maintain daily field presence, communicate ahead of formal inspection requests.
 3. Closeout: Final verification, clear documentation, and support for turnover.
- Michael Davis stressed that "Inspect to Pass" is not about compromising standards but about supporting the project team toward first-time success.

Informational and Action Items

- Michael Davis to integrate IOR metrics tracking, transparency culture, and admin support roles into the presentation.
- Scott Mackey explicitly emphasized that the lead Inspector of Record should plan to attend OACI meetings for the full duration of the project and should build that time commitment into their project planning and staffing.

- Scott Mackey, Gary Dunger, Joe LaBrie, and Bert Hurlbut strongly supported keeping Inspectors of Record (IORs) engaged in OACI meetings throughout the project.

Subcommittee Comments

- Bert Hurlbut proposed the use of inspection success metrics and weekly reporting as a performance yardstick.
- Joe LaBrie encouraged the team to confront and dispel any stigma of secrecy around inspections.
- Gary Dunger emphasized the need for formal inspection request procedures and owner-supported admin help to free inspectors to focus on field work.

Public Comments

None.

Item #3e. OSHPD and Field Staff - Monica Colosi

Discussion and Input

- Monica Colosi described the project delivery process as a “chair,” where each stakeholder forms a critical leg.
- She emphasized shared accountability regardless of project delivery method.
- Monica introduced HCAI-developed tools to support teams: IOR Daily Report template, and CAP (Construction Administration Proficiency) Exam.
- She advocated for high engagement and clear role understanding as drivers of project success.

Informational and Action Items

- Monica Colosi to incorporate visuals for the “chair” metaphor and HCAI tools.
- Joe Labrie’s “Care to Pass” suggestion noted for possible use in the final conclusion of the webinar.

Subcommittee Comments

- Bert Hurlbut emphasized the need for OSHPD participation in resolving as-built field issues quickly.
- Joe LaBrie proposed the phrase “Care to Pass” as a potential thematic conclusion; underscoring that caring drives quality and collaboration.

- Monica Colosi, Joe LaBrie, and Bert Hurlbut were key contributors expressing and reinforcing the theme of OSHPD as a collaborative and constructive partner.

Public Comments

None.

4. Plan for future meetings and practice sessions

Facilitator: Michael Davis (or designee)

Michael Davis initiated discussion on how the subcommittee will complete and prepare its presentation on the Collaborative Inspection Approach to Field Inspections. He emphasized the need to establish intermediate deadlines, assign responsibilities for slide development, and schedule practice sessions in preparation for the final public webinar.

Discussion and input:

- Michael Davis confirmed that the next scheduled subcommittee meeting is on April 24, 2025, and stated it will serve as a mock walkthrough of the presentation. He clarified that the walkthrough does not need to be a fully rehearsed delivery but should serve to evaluate structure, logic, transitions, and overall content flow.
- Scott Mackey asked for clarification on whether the April 24, 2025, meeting is the date of the webinar or the next subcommittee meeting. Michael Davis confirmed it is the next subcommittee meeting, not the webinar.
- Scott Mackey then recommended treating that session as a rough dry run and evaluating from there whether additional interim sessions would be needed.
- Cody Bartley pointed out that in the last webinar, multiple iterations of the slide deck were needed. He raised concern that the subcommittee does not yet have a complete outline or designated point person for PowerPoint. He offered to take responsibility for assembling and formatting the PowerPoint slides, provided that he receives the full outline first.
- Michael Davis responded that once all members complete their sections, they should submit them to HBSB support staff. He will then assemble the sections into a master outline and distribute it back to the subcommittee ahead of the April 24, 2025, meeting.
- Cody Bartley proposed a milestone schedule to stay on track:

- By April 9, 2025: All subcommittee members submit their section outlines to HBSB support staff.
- By April 16, 2025: All PowerPoint slides and visual content should be submitted to Cody Bartley.
- Cody Bartley will compile the presentation and send it to HBSB support staff, who will then distribute it to the subcommittee.

Veronica Yuke reminded Michael Davis that the agenda for the April 24, 2025, meeting must be submitted to her by Wednesday, April 2, 2025, in order to meet the legal deadline of April 4, 2025. Michael Davis confirmed he would submit the agenda on time.

Michael Davis outlined that the April 24, 2025, meeting agenda will include:

- A full mock walkthrough of the presentation.
- A group feedback session on flow and structure.
- A discussion on how to shape the introduction and conclusion.
- Scott Mackey added that visual content should also be finalized and provided before April 24, 2025, so subcommittee members are not seeing the materials for the first time during the walkthrough.
- Veronica Yuke asked if the subcommittee planned to meet again before the full board meeting in June. Michael Davis requested the date of the full board meeting, and Veronica Yuke confirmed it is scheduled for June 3–4, 2025.
- Veronica Yuke proposed that the subcommittee meet again during the week of May 19, 2025. Michael Davis agreed and said he would provide his availability, noting he will be out of town for part of that week. Veronica Yuke offered to poll the subcommittee for availability during that window.
- Michael Davis stated that the May meeting would serve as a refined practice session, incorporating completed slides, final outline structure, and transitions. He emphasized that the introduction and conclusion should be finalized by that time and that the subcommittee should aim for a well-paced, polished presentation for board delivery.

Informational and Action items

- Subcommittee members must submit section outlines to HBSB support staff by April 9, 2025.
- PowerPoint slides must be submitted to Cody Bartley by April 16, 2025.
- Michael Davis will submit the April 24 agenda to Veronica Yuke by April 2, 2025.

- Cody Bartley will assemble the slide deck and submit it to HBSB staff for distribution before April 24, 2025.
- The subcommittee will meet again the week of May 19, 2025, for a full practice session (exact date TBD by poll).
- Full board presentation is targeted for the June 3–4, 2025 meeting.

Voting

No votes were held or required during this agenda item.

Subcommittee Comments

- Scott Mackey, Cody Bartley, and Veronica Yuke all contributed to shaping the workflow and meeting cadence.
- All subcommittee members agreed on the value of a structured development timeline and collaborative refinement process.

Public Comments

No public comments were made or recorded during this agenda item.

5. Comments from the Public/Subcommittee Members on Issues not on this Agenda

Facilitator: Michael Davis (or designee)

Michael Davis opened the floor to the subcommittee and the public for any comments or concerns related to the Collaborative Inspection Approach to Field Inspections that were not listed on the meeting agenda.

Discussion and input:

- No subcommittee or public comments were made.

6. Adjournment.

Michael Davis emphasized the importance of the action items discussed, including preparation for the mock walkthrough, the development of the full presentation, and the planning of future practice sessions. He expressed appreciation for the collaborative tone of the meeting and the commitment shown by the subcommittee members.

Michael Davis adjourned the meeting at 11:20 a.m.

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2020 West El Camino Avenue, Suite 800
Sacramento, CA 95833
hcai.ca.gov



**Hospital Building Safety Board
Collaborative Inspection Approach to Field Inspections
Webinar Development Subcommittee**

**April 24, 2025
10:00 a.m. – 4:00 p.m.**

Locations:

2020 West El Camino Ave, Conference Room 930, Sacramento, CA 95833
355 South Grand Avenue, Conference Room 1901, Los Angeles, CA 90071

Subcommittee Members Present

Michael Davis, Subcommittee Chair
Cody Bartley, Subcommittee Vice Chair
Gary Dunger

HCAI Staff Present

Chris Tokas
Monica Colosi
Joe LaBrie
Andia Farzaneh

HBSB Staff Present

Veronica Yuke, Executive Director
Marcus Palmer
Evelt Torres

- 1 **1. Call to Order and Welcome**
- 2 **Facilitator:** Michael Davis, CHI, CEO Emeritus, DavisHBC, Inc.; Subcommittee
- 3 Chair
- 4 Michael Davis opened the meeting at 10:00 a.m., welcomed attendees, and
- 5 turned over facilitation to Veronica Yuke for roll call and meeting advisories.

1 **2. Roll Call and Meeting Advisories/Expectations**

2 **Facilitator:** Veronica Yuke, Manager, HCAI; Executive Director

3 Veronica Yuke conducted the roll call and confirmed a quorum. She then outlined
4 the rules of engagement and identification protocols.

6 **3. Draft Meeting Reports/Minutes**

7 **Facilitator:** Michael Davis

8 **Discussion and Input**

9 Michael Davis opened the item by reviewing the draft meeting reports from the
10 February 27, 2025, and March 27, 2025, subcommittee meetings. He
11 summarized the key activities and outcomes of each session.

12 For February 27, 2025, Michael Davis explained that the subcommittee:

- 13 • Discussed and finalized the presentation sequence: Ownership,
14 Design Professional of Record, Contractor of Record, Inspector of
15 Record and Testing Lab, then OSHPD/Field Staff. This order aligns
16 with the actual sequence of field construction events.
- 17 • Scheduled future meetings for March 27 and April 24.
- 18 • Set goals for continued progress.

19 For March 27, 2025, Michael Davis reported that the subcommittee:

- 20 • Reviewed each presenter's progress on their assigned webinar
21 content.
- 22 • Confirmed April 24 as a dry-run session to refine presentations.

23 Michael Davis concluded his overview by recommending the subcommittee
24 approve both draft reports.

25 **Subcommittee and Public Comments:**

- 26 • None.

27 **Informational and Action Items**

- 28 • The subcommittee confirmed that both meeting reports accurately
29 documented subcommittee proceedings.
- 30 • Approval of the reports formally acknowledged prior decisions and
31 actions, ensuring continuity in webinar planning.
- 32 • No revisions or amendments to the draft minutes were proposed.

1 **Voting:**

- 2 • **Motion:** Cody Bartley moved to approve the February 27 and March
- 3 27, 2025, draft meeting reports of the Collaborative Inspection
- 4 Approach to Field Inspections Webinar Development Subcommittee.
- 5 • **Second:** Gary Dunger
- 6 • **Vote Results:** Unanimous via roll-call vote.
- 7

8 **4. Mock delivery of webinar presentation outlines**

9 **Facilitator:** Michael Davis

10 **Discussion and Input**

11 Michael Davis introduced the mock presentation segment by acknowledging that

12 Scott Mackey was absent and that he, Michael Davis, was not yet fully satisfied

13 with the development of his own section. He proposed beginning with

14 presentations from Gary Dunger, Cody Bartley, and Monica Colosi, followed by

15 an overview of his updated material. He framed this session as a critical progress

16 checkpoint, estimating the webinar outline to be about 80% complete.

17 **Gary Dunger – Ownership Section**

18 Gary Dunger delivered a draft presentation emphasizing the owner’s pivotal role

19 in ensuring inspection success. His content covered:

- 20 • The importance of early and continuous involvement.
- 21 • The owner’s duty to hire qualified teams, allocate resources, manage
- 22 risk, and make timely decisions.
- 23 • The unique long-term perspective of owners as stewards of healthcare
- 24 facilities.
- 25 • The consequences of inadequate inspection, including safety failures,
- 26 operational issues, and legal liability.
- 27 • Best practices, including maintaining documentation, collaboration, and
- 28 administrative support for inspectors.

29 He previewed real-world case examples and acknowledged that his draft

30 remained a work in progress, inviting suggestions for improvement.

31 **Cody Bartley – Contractor of Record Section**

32 Cody Bartley presented the “Build to Pass” contractor perspective. His outline

33 emphasized:

- 34 • The contractor’s QC responsibilities, including subcontractor oversight
- 35 and internal verifications before IOR review.

- The need for early collaboration with IORs, especially through mockups and first-in-place inspections.
- A layered QC process that reduces failed inspections and schedule disruptions.
- The importance of a team culture, open communication, and proactive issue identification.

Cody Bartley proposed showing a sample QC checklist during the final presentation and discussed the value of aligning subcontractors with contractor expectations.

Michael Davis – Inspector of Record Section

Michael Davis introduced the “Inspect to Pass” mindset, focusing on the inspector’s philosophy, responsibilities, and ethical role. His outline included:

- Attitude toward team members (contractor, DPOR, owner, OSHPD).
- Misconceptions about “Inspect to Pass” implying leniency or bias.
- The need for proactive, transparent, and respectful communication.
- Ethical conduct and collaboration with the design team and ownership.
- The role of inspectors as guardians of public trust, not adversaries.

Michael Davis emphasized the importance of inspectors being included at the decision-making table and proposed framing the IOR role within a larger ethical and operational context.

Subcommittee and Public Comments:

- Joe LaBrie supported Gary Dunger’s points, emphasizing that owners often disengage after project startup. He urged highlighting continuous oversight and the importance of including inspectors in early and ongoing conversations.
- Chris Tokas agreed and stressed that a disengaged owner is one of the biggest risks to successful construction. He supported the idea of integrating case studies and real-world failure examples.
- Michael Davis echoed these sentiments, referencing OACI meetings and early close-out planning as mechanisms for long-term engagement.
- Cody Bartley suggested that ownership should introduce the OACI model early in the process. Gary Dunger agreed and offered to incorporate this into his presentation.
- During Cody Bartley’s segment, Chris Tokas emphasized clarifying the difference between QA and QC, urging Cody to clearly define

contractor responsibilities. Cody welcomed the input and agreed to strengthen that portion.

- Joe LaBrie raised concerns about subcontractor alignment, noting that most inspection issues stem from subcontractor performance. He advocated for a strong culture of expectation alignment from the general contractor down through all trades. Cody Bartley acknowledged the issue and proposed reinforcing this through QC documentation and proactive engagement.
- Chris Tokas shared an example of fabrication failure caused by poor oversight in the QC chain, reinforcing Cody Bartley's point about systemic redundancy and the need for deep contractor involvement.
- Joe LaBrie and Chris Tokas both strongly endorsed the development of this seminar, calling it a critical advancement for the construction industry. They suggested the potential for the current content to evolve into a full-day seminar, due to its national relevance and value.
- Michael Davis concluded with a request for all members to actively share feedback and ideas to help refine each section.
- A member of the public suggested pointing out during the webinar, the usefulness of the OSHPD survey for relaying good and bad experiences
- A member of the public noted there were some topics that overlapped between presentations and suggested using Google Docs to facilitate collaboration.
- The same member of the public recommended Nanci Timmins for the role of seminar facilitator.

Informational and Action Items

- The subcommittee confirmed that each presenter would continue refining their material based on feedback.
- Members were encouraged to collaborate across roles by providing input on each other's sections.
- Gary Dunger agreed to introduce the OACI model in the ownership section.
- Cody Bartley committed to clarifying QA vs. QC and improving subcontractor-related QC strategies.
- Michael Davis planned to rework portions of his ethics segment to emphasize accountability without implying inspectors should prioritize cost savings.
- Chris Tokas and Joe LaBrie proposed expanding the webinar content into an eight-hour seminar with deep dives and case studies.

- The subcommittee agreed to revisit the roles for the introduction and conclusion in a future session but did not make final decisions during this meeting.

5. Discuss ideas for the introduction and conclusion of the webinar

Facilitator: Michael Davis

Discussion and Input

Michael Davis opened the discussion by revisiting past conversations where the subcommittee had considered assigning either Scott Mackey or another member to deliver the introduction of the webinar. He acknowledged that no final decision had been made in prior meetings and emphasized the importance of crafting an effective opening and closing to set the tone and leave a lasting impact.

Michael Davis observed that Gary Dunger's mock presentation already included introductory content, which could potentially serve as the webinar's actual opening if the subcommittee opted to keep the flow streamlined from ownership into the rest of the presentation.

He stressed that the introduction should do the following:

- Welcome attendees and establish the webinar's purpose.
- Emphasize the importance of inspections in healthcare construction.
- Outline the structure of the presentation and speaker roles.
- Set expectations for what the audience will learn and why it matters.
- Regarding the conclusion, Michael Davis noted that it should:
 - Recap key takeaways from each speaker.
 - Reinforce the value of a collaborative, accountable inspection approach.
 - Encourage attendees to review their inspection protocols.
 - Invite further training or certification if appropriate.
 - Include a Q&A segment to clarify any outstanding issues.
- He asked the subcommittee to consider whether the introduction and conclusion should be delivered by one individual or shared between members.

Subcommittee and Public Comments:

- Cody Bartley suggested working on getting the content done first, then figuring out the introduction and conclusion.
- Gary Dunger expressed the need to determine if this was to be a webinar or a seminar and added that he believed there was enough

1 content to warrant a full day seminar. Chris Tokas agreed but
2 explained that he wouldn't know if an in-person seminar was feasible
3 for 2026 until the State budget is released on July 1st.

- 4 • Gary Dunger stated that having "Inspection" in the title twice was
5 redundant and to consider reworking the name.
- 6 • Gary Dunger expressed openness to incorporating his introductory
7 remarks into the formal webinar opening. He acknowledged that his
8 content was designed to set the tone for the entire presentation and
9 would flow naturally into his ownership section.
- 10 • Michael Davis supported this approach, saying it may be most efficient
11 and effective to have Gary Dunger open the webinar directly,
12 especially since his presentation already establishes the foundational
13 context of inspections from the owner's point of view.

14 **Informational and Action Items**

- 15 • The subcommittee will continue to evaluate options for delivering the
16 introduction and conclusion in a cohesive and compelling manner.
- 17 • Michael Davis advised all members to remain open to assigning or
18 adjusting responsibilities based on the final structure and narrative flow
19 of the webinar.
- 20 • The final decision on who delivers the introduction and conclusion was
21 deferred to a future meeting.
- 22 • Members were encouraged to continue submitting ideas and draft
23 remarks for both segments for future review and integration.
- 24 • The subcommittee should prepare content for a full-day seminar and
25 condense it to a webinar later, if necessary.

27 **6. Plan for future meetings and practice sessions**

28 **Facilitator:** Michael Davis

29 **Discussion and Input**

30 Michael Davis initiated the discussion by highlighting the need to schedule a
31 refined practice session in late May 2025. He proposed that the upcoming
32 session should serve as a rehearsal of the full presentation, incorporating
33 feedback from the April 24 mock deliveries and addressing final refinements.

34 He reiterated that the subcommittee had made significant progress, estimating
35 the overall presentation was approximately 80% developed. The next meeting
36 would therefore focus on:

- 37 • Completing the final 20% of content.

- Practicing transitions between speakers.
- Incorporating the introduction and conclusion segments.
- Finalizing slides and coordinating presentation flow.
- Michael Davis also introduced the idea of beginning to identify potential dates for the public webinar presentation, depending on the readiness and performance during the May session.

Subcommittee and Public Comments

There were no additional comments from subcommittee members or members of the public specifically during this agenda item.

Informational and Action Items

- The subcommittee will schedule a meeting for June 19, 2025 for a refined practice session.
- The focus will include:
 - Delivery of finalized presentation content.
 - Practicing speaker transitions.
 - Including finalized introduction and conclusion sections.
- The subcommittee will also begin identifying target dates for the official webinar delivery.
- Subcommittee members are expected to submit any final edits or updates to their presentation sections prior to the June meeting to allow for a focused rehearsal.
- HBSB Staff will provide the subcommittee with deadline dates for submitting PowerPoints and agenda items.
- Michael Davis reminded all members to continue collaborating and sharing updates or suggestions via subcommittee support staff before the next session.

7. Comments from the Public/Subcommittee Members on Issues not on this Agenda

Facilitator: Michael Davis

Discussion and Input

Michael Davis opened the floor for comments from both subcommittee members and members of the public regarding issues not listed on the agenda. He clarified that although the subcommittee could not act on these matters during the current meeting, suggestions and concerns raised could be added to a future agenda for formal discussion or action.

1 **Subcommittee Comments and Public Comments**

- 2 • None

3 **Informational and Action Items**

- 4 • None.

5

6 **8. Adjournment.**

7 Michael Davis adjourned the meeting at 12:23 p.m.

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Building Standards Unit Update

Proposed Functional Program Advisory Guide

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**Advisory
Guide
Series**

AX

**FUNCTIONAL
PROGRAM**

Office of Statewide Hospital Planning and Development

DRAFT

**Department of Health Care Access and Information
Office of Statewide Hospital Planning and Development**

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INTRODUCTION

The preparation and use of the functional program are required under California Administrative Code (CAC) Section 7-119 of Title 24. The functional program requirement applies to all new construction, additions, or modifications to specific hospital department function that affects patient care directly or indirectly. The functional program requirement is intended to result in an effective document to identify the intent of the project's design solution and the appropriate standards to apply during the review process.

A functional program must be submitted to the Department of Health Care Access and Information (HCAI) at the time of application for plan review. The Office of Statewide Hospital Planning and Development (OSHPD) of HCAI reviews the project plan based on the functional program. OSHPD forwards functional programs to the California Department of Public Health (CDPH) for review. This is an optional courtesy that CDPH provides in working with HCAI during plan review. The objective is to identify any potential licensing issues during plan review and prior to plan approval, if possible.

A written functional program must concisely reflect the proposed project. Either lacking essential information or too much unnecessary information would delay the plan review and approval. A concise functional program would promote the effectiveness and efficiency in both CDPH and HCAI review and approval process. The intent of this Advisory Guide is to assist the facilities to develop an effective functional program that includes the required elements for the proposed project. However, it is the facilities' responsibility to comply with applicable regulations and requirements.

**Department of Health Care Access and Information (HCAI)
Office of Statewide Hospital Planning and Development (OSHPD)**

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SECTION 1 CODE REFERENCES

Title 24, Part 1, California Administrative Codes, Section 7-119 addresses the requirements for Functional Program. The other parts of Title 24 should be applied as applicable for the proposed service space.

Access is provided to the codes promulgated by OSHPD through the California Building Standards Commission website (<https://www.dgs.ca.gov/en/BSC/Codes>) with active links to each publisher's website for read-only public access versions of the codes.

Part 1, California Administrative Code

Part 2, California Building Code, Volumes 1 and 2

Part 3, California Electrical Code (Note: Accessed through the National Fire Protection Association (NFPA), however, requires the creation of a user account to view the [Free Access - NFPA 70: 2022 California Electrical Code - NFPA 70 \(2020 NEC®\)](#))

Part 4, California Mechanical Code

Part 5, California Plumbing Code

Part 6, California Energy Code

Part 9, California Fire Code

Part 10, California Existing Building Code

Although preparing and using a functional program are primarily Title 24 requirements, facilities should also observe applicable Title 22 requirements for the proposed services and spaces as they must be licensed before providing services in those spaces. In general, the functional program should outline any potential Title 22 licensing impacts and how those impacts are addressed, including the relevant policies that would demonstrate compliance.

Title 22 regulations can be found at [California Code of Regulations - California Code of Regulations \(westlaw.com\)](#)

This Advisory Guide is the result of a joint effort between various regulatory authorities, namely, Hospital Building Safety Board Education and Outreach Committee and California Department of Public Health (CDPH). Consequently, references from a number of code sources are included.

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SECTION 2

ACRONYMS AND DEFINITIONS

Acronyms and Definitions assist the user in recognizing and identifying various acronyms and terms generally used in OSHPD documents. Please refer to the Master Glossary of Acronyms and Definitions on the HCAI website at <https://hcai.ca.gov/document/master-glossary-of-acronyms-and-definitions/>.

Other definitions may also be found in the Title 24, California Code of Regulations, California Building Standards Code.

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SECTION 3 OVERVIEW

1. What is a Functional Program?

A Functional Program, as outlined in CAC Section 7-119, is a comprehensive document that defines how a healthcare facility will operate once construction is complete. Utilizing a multi-disciplinary effort, it should encompass the entire project scope, programming, and operational use of the project. It serves as the foundation for ensuring that the physical environment supports the facility's intended use, patient care services, and regulatory requirements.

2. When is a Functional Program Required?

A functional program must be submitted to the Office of Statewide Hospital Planning and Development (OSHDP) of HCAI at the time of application for plan review. The purpose of the functional program is to serve as a reference for the review of the application documents.

A Functional Program is required for:

- **New Construction:** Any new healthcare facility or building that delivers patient care services.
- **Major Alterations or Renovations:** Substantial renovations impacting patient care directly or indirectly (e.g., surgical suites, emergency departments, inpatient units, or dietary department).
- **Licensing and Certification Changes:** Projects that change the licensure status or classification of an existing facility.

3. What are the Key Elements of a Functional Program?

While streamlining your document, focus on these essential sections to ensure regulatory compliance:

3.1. Facility Mission and Goals

- Briefly describe the overall mission and goals of the healthcare facility.
- Highlight the services provided and the population served.

3.2. Scope of Services

- Summarize the clinical and support services the facility will offer (e.g., emergency care, outpatient services, specialty care).
- Include specific patient types or service categories.

3.3. Operational Models

- Outline the workflow for patient care delivery, including staffing patterns, patient flow, and departmental relationships.
- Provide an overview of anticipated staff-to-patient ratios and care delivery methods (e.g., in-person, telehealth).

3.4. Space Requirements

- Provide a high-level summary of space needs for each service, including treatment areas, support spaces, and staff spaces.
- Describe special equipment or technology needs that impact space planning.

3.5. Patient and Staff Safety

- Identify how the design will support patient and staff safety (e.g., infection control, security, emergency preparedness).
- Address any features designed for safety in critical areas such as behavioral health units or high-acuity care spaces.

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SECTION 4

HOW TO DEVELOP AND SUBMIT A FUNCTIONAL PROGRAM

1. Coordination with Key Stakeholders

- Engage clinical and operational leaders early to ensure that the program reflects their needs.
- Involve architects, engineers, end user groups, and facility managers in developing operational space requirements.

2. Document Formatting and Submission

- Keep the document concise: e.g. about 10 pages excluding diagrams or floor plans for a small remodel project, about 22 pages excluding diagrams or floor plans for a new facility project.
- Use bullet points and tables where possible to simplify information.
- Include basic floor plans, thorough diagrams, and patient flow charts. Use color coding for easy reference.

3. Review and Approval Process

- Ensure alignment with California Building Standards Code (Title 24, Part 2) and other applicable codes.
- Use a streamlined approach to ensure that the Functional Program complies with OSHPD CAC Section 7-119 while minimizing unnecessary complexity, facilitating a smooth review and approval process.
- Be prepared for iterative reviews and adjust based on feedback from OSHPD and CDPH.

By focusing on the core elements of your facility's mission, scope, and safety considerations, the Functional Program can be efficiently created without excessive detail. Ensure all required information is clearly presented and easily navigable for regulatory bodies to expedite the review process.

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SECTION 5 SOME HELPFUL HINTS

1. Separate Functional Programs

OSHPD reviews and approves the functional program in coordination with CDPH. CDPH reviews the programming and clinical use whereas OSHPD reviews the building code requirements. Therefore, submitting a separate functional program for pharmacy and dietetic services allows OSHPD to forward the specific functional program to the different disciplines within CDPH.

For dietetic functional programs, refer to Advisory Guide A3 – Dietetic Design and Review Checklist for Hospital and SNF facilities.

For pharmacy functional programs, refer to Advisory Guide A2 – Sterile Compounding Pharmacies for Hospital Facilities.

2. Imaging Classification

If the scope of the project includes an imaging modality, the functional program must indicate which classification of room type will be used (Imaging class I, II, III).

If procedures will be performed within the imaging space, a list of procedures must be included in the functional program. It is the responsibility of CDPH to validate the procedure list with the proposed imaging classification.

More information regarding imaging rooms and procedure rooms can be found at CBC section 1224.4.11.4a and **Advisory Guide A10** [need to verify this guide if it would be published.]

3. Scope Processing Department

The Scope Processing Department functional program should include a detailed path of travel from point of care to transporting clean scopes to their storage cabinets. The functional program should also describe what processes will take place at each point or room. Providing these details would help CDPH reviewers to determine if the proposed service provided in the proposed space would meet the patient safety and infection control requirements.

4. Psychiatric units or hospitals projects

For psychiatric functional programs, refer to Advisory Guide A4– Acute Psychiatric Hospitals, Psychiatric Nursing Units in General Acute Care Hospitals, and Special Treatment Programs in Skilled Nursing Facilities [OSHPD 1, 2 & 5] Buildings.

5. Emergency Department

For emergency department functional program, it should indicate the location where psychiatric patients are housed and describe a secure holding area with ligature free.

6. Mobile Units

For mobile unit functional program, indicate Inpatient or Outpatient services and describe the path of travel including walkway. Refer to PIN 34 – Review of Mobile Units Used for Outpatient Hospital Services.

7. Floor plans and compliance diagrams

For new buildings and remodels: The design professional shall provide scaled, legible floor plans of the area of work/alteration and provide the information required in the Functional Program section of the California Administrative Code and applicable provisions of the California Building Code, California Electrical Code, California Mechanical Code, California Plumbing Code, California Energy Code, California Fire Code, and the California Existing Building Code (Parts 3, 4, 5, 6, 9 and 10). This includes names for spaces and departments which are consistent with the those used in the California Building Code. Scaled floor plans may be accompanied by compliance diagrams which intended to convey overall compliance, workflow, or facility, department, or area operations.

Floor plans and compliance diagrams shall include overall color-coded floor plans with identification of departmental names and boundaries, and room names (using building code nomenclature). Floor plans and compliance diagrams shall illustrate how the area of work/alteration complies with code requirements.

8. Remodels with a change in function

For remodels, if the function or use within the area of alteration is proposed to change, the floor plan or compliance diagram shall identify the area or areas which are proposed to the change function or use per **CAN 2-102.6 Remodel** (Renovations, Alterations, Repairs). Any change in function shall comply with all the functional requirements for new construction under the **current code** cycle.

At a minimum, the functional program for remodels with a change in function shall include:

- a) Floor plans or compliance diagrams shall identify existing functions that are affected by the scope of work and clarify whether those functions are relocated elsewhere or eliminated.
- b) Color-coded, overall floor plans or compliance diagrams shall identify department names and boundaries.
- c) Floor plans or compliance diagrams shall provide room names, using code nomenclature, and clearly distinguish existing functions versus proposed functions.

- d) If a project proposes installing a new procedure room in a previously approved space from a previous code cycle, provide the previously approved OSHPD project number. If available, provide a floor plan and a detailed code comparison analysis between the proposed layout and the layout of the previously approved layout.
- e) For procedure or imaging rooms, include the class of imaging room or rooms and the procedures that will be performed - refer to Table 1224.4.11.4a of Section 1224.4, Part 2, Volume 1, California Building Code.
- f) For all imaging projects, the functional program should specify whether the area of alteration serves inpatients, outpatients, or both, including the percentage of each population. The floor plans should illustrate the location of, and adjacency to, pre-op/post-op areas, the location and extent of the semi-restricted corridor, surgical staff changing areas, and the path of travel for inpatients, outpatients, and staff. The functional program should describe the line of sight from the nurse's station to pre-op and post-op patient holding areas.

9. Construction Project Phasing and Licensing Considerations

In any healthcare construction project, phasing is critical to ensure smooth transitions between different stages of the project, while minimizing disruptions to ongoing operations. The phasing plan, which should be outlined in the Functional Program, breaks the project into manageable segments and provides a roadmap for execution, taking into account both construction and regulatory milestones. This section provides a structured approach to phasing construction projects in healthcare facilities, focusing on coordination with CDPH to ensure timely approvals and smooth transitions between phases.

9.1 Importance of Phasing in the Functional Program

Each phase of a healthcare project should be clearly defined in the Functional Program, specifying the scope of work, areas impacted, and how it aligns with the facility's operations and licensing requirements. By detailing the phases, all:

- Ensure minimal impact on patient care services.
- Maintain clear communication with stakeholders.
- Prepare for regulatory reviews operational planning.
- Facilitate efficient project management and construction sequencing.

9.2 CDPH Approval Requirements for Each Phase

For projects that involve significant renovations, new construction, or changes to licensed spaces, it is important to understand that each phase may require California

Department of Public Health (CDPH) approval before progressing to the next. Consider the following when outlining phases:

- **Interim Licensing or Occupancy:** If a particular phase involves putting new or renovated spaces into service before the entire project is completed, CDPH must review and approve that phase for licensing. This may involve submission of separate applications to the Central Applications Branch (CAB) with District Office review and on-site inspections to ensure the space is ready for patient use.
- **Transition Between Phases:** If a transition between phases involves shifting services to temporary locations or altering the functional use of certain areas, CDPH approval may be needed to ensure that patient care, safety, and regulatory standards are maintained during the transition. A Program Flexibility may need to be submitted.
- **Regulatory Approvals:** For phased projects, CDPH may require the completion of certain critical components (e.g., life safety systems, infection control measures) before the next phase can begin. There may also be other jurisdictions that need to review and approve prior to occupancy (e.g., Board of Pharmacy) and you must account for these reviews in the project schedule.

9.3 Considerations for Timing of Licensing

Licensing needs should be closely aligned with the project schedule to avoid delays that could disrupt the transition to new spaces. Consider the following factors:

- **Early Coordination with CDPH:** Start conversations with CDPH early in the planning phase to clarify the requirements for each phase. This will help avoid surprises later in the project and ensure that CDPH has time to perform inspections and issue necessary approvals.
- **Lead Time for Inspections:** Allocate sufficient time for CDPH to review documentation, conduct inspections, and process licenses. This may require coordination with OSHPD to ensure that building standards are met in advance of CDPH inspections. As per AB 2798 (Chapter 922, Statutes of 2018), CDPH is required to review and either approve or deny a written application submitted by a General Acute Care Hospital (GACH) or an Acute Psychiatric Hospital (APH) within 100 days of receipt, including all associated activities. CDPH's district offices (DO) must complete any additional reviews, including onsite inspections, and submit their findings within 30 business days after the written application is approved.
- **Contingency Planning:** Build flexibility into the project timeline to account for potential delays in receiving CDPH approval. Having a contingency plan for each phase ensures that project milestones can be adjusted without compromising overall project delivery.

9.4 Phasing Examples

- **Example 1: Staged Opening of Clinical Spaces**

A phased project may involve completing and licensing outpatient areas first, while inpatient units are still under construction. In this case, CDPH would review and approve the outpatient space before it can be occupied and operational, while also planning for future reviews of the inpatient spaces.

- **Example 2: Transitioning Critical Care Units**

If a renovation project involves relocating an intensive care unit (ICU) to a temporary space, CDPH must approve the temporary location before the ICU can operate there. Once the renovation is complete, the final ICU space will require another round of CDPH review and licensing. A program flexibility may be required.

By planning your project phases with regulatory requirements in mind, you can avoid delays in licensing and occupancy, ensuring that each phase proceeds smoothly and is ready for patient use when completed.

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SECTION 6

UNDERSTANDING OSHPD ALTERNATE METHOD OF COMPLIANCE VS CDPH PROGRAM FLEXIBILITY

In the context of healthcare facility construction and operational planning, both the Office of Statewide Health Planning and Development (OSHPD) and the California Department of Public Health (CDPH) offer mechanisms for facilities to deviate from strict code compliance under certain conditions. These mechanisms—OSHPD's Alternate Method of Compliance and CDPH's Program Flexibility—allow facilities to meet the intent of regulatory requirements while providing flexibility in unique situations.

1. OSHPD Alternate Method of Compliance (Per CAC Section 7-104)

Definition:

- The OSHPD Alternate Method of Compliance (AMC) allows healthcare facilities to propose alternative solutions that meet or exceed the intent of California's Building Standards Code (Title 24) when strict adherence to the code is impractical or impossible. These alternatives must provide equivalent safety, functionality, and performance as the original code requirements.

When to Use:

- An OSHPD Alternate Method of Compliance should be considered when the facility encounters construction or design challenges that make compliance with Title 24 codes difficult or unfeasible.
- It is typically used in cases of innovative designs or technological solutions that meet the performance objectives of the code but do not strictly follow prescribed methods.

Approval Process:

- Submit a formal application to OSHPD, including a detailed description of the proposed alternative, supporting technical documentation, and an explanation of how it meets the intent of the original code.
- OSHPD evaluates the application based on whether the alternate method achieves the same or greater level of safety and functionality.

2. CDPH Program Flexibility (Per 22 CCR § 70129)

Definition:

- CDPH's Program Flexibility permits healthcare facilities to request flexibility from specific regulatory requirements set forth in the California Code of Regulations (Title 22) related to licensing and operational standards. The facility must

demonstrate that the alternative method of operation achieves the same or higher standard of care and service.

When to Use:

- Program Flexibility is typically sought when a healthcare facility wishes to deviate from Title 22 operational or licensing requirements without compromising the quality of care or safety of patients.
- Commonly used for operational issues, such as service delivery methods, or physical plant standards, that do not strictly adhere to the requirements but meet the intent of the regulations.

Approval Process:

- The facility submits a request to CDPH outlining the proposed program flexibility, along with an explanation of how the alternative approach will maintain or improve patient care standards.
- CDPH evaluates whether the program flexibility ensures the same level of safety and quality as the original regulation.

3. Key Differences

Aspect	OSHPD Alternate Method of Compliance (CAC 7-104)	CDPH Program Flexibility (22 CCR § 70129)
Regulatory Scope	Focuses on building standards (Title 24, Part 2)	Focuses on operational and licensing standards (Title 22)
Use Case	Construction, structural design, and building performance	Service delivery and operational practices
Objective	To meet or exceed the intent of building codes	To maintain or improve the standard of patient care
Regulatory Body	OSHPD	CDPH
Common Scenarios	Structural retrofits, use of new materials or technology	Flexibility in operational policies
Application Process	Formal submission to OSHPD with supporting documentation (form HCAI-FD-126)	Formal submission to CDPH with justification of equivalency (Risk & Safety Solutions Portal)

4. When to Use OSHPD Alternate Method vs. CDPH Program Flexibility

OSHPD Alternate Method of Compliance (CAC 7-104):

- Use when addressing physical construction challenges such as retrofitting, using alternative materials, or implementing new construction technologies that do not follow standard code requirements but meet safety and performance objectives.
- Example: Proposing an innovative seismic bracing system that achieves the same level of safety as the prescribed methods in Title 24.

CDPH Program Flexibility (22 CCR § 70129):

- Use when deviating from operational regulations set forth in Title 22, as long as patient care and safety standards are maintained or improved.
- Example: A hospital might request program flexibility to create an alternate path of travel for staff and patients during a large renovation project. For instance, if the main corridor typically used for transporting patients is under construction, the hospital could propose using a service hallway as a temporary alternate route. Though Title 22 might require specific pathways for patient transport, the hospital could demonstrate that the alternate path is safe, accessible, and meets infection control and privacy standards, ensuring patient care is not compromised during the renovation.

By understanding the difference between OSHPD's Alternate Method of Compliance and CDPH's Program Flexibility, healthcare facilities can effectively determine the appropriate path for regulatory compliance while maintaining safety, functionality, and high-quality patient care. Both mechanisms offer avenues to ensure innovation and practicality while meeting the intent of state regulations.

More design guides and resources can be found at [Training & Education - HCAI](#)

CANs and PINs that may help with the project design can be found at [Codes and Regulations - HCAI](#)

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APPENDIX A FUNCTIONAL PROGRAM CAC 7-119 CHECKLIST

The checklist summarizes and references the applicable requirements from the Office of Statewide Health Planning and Development (OSHPD) as adopted and amended to the California Building Standards Code. Applicants should verify compliance of the plans submitted for building permit with all referenced requirements from OSHPD when completing this checklist.

Facility Name:	Click or tap here to enter text.		
OSHPD Project Number:	Click or tap here to enter text.		
Facility Number:	Click or tap here to enter text.	Date:	Click or tap here to enter text.
No. of Beds:			
(a) General			
<input type="checkbox"/>	1. Functional program requirement. The owner or legal entity responsible for the outcome of the proposed health care facility design and construction project shall be responsible for providing a functional program to the project's architect/engineer and to OSHPD.		
<input type="checkbox"/>	2. Functional program purpose. A. An owner-approved functional program shall be made available for use by the design professional(s) in the development of project design and construction documents, and shall be submitted to OSHPD. B. Revisions to the functional program shall be documented and a final updated version shall be submitted to OSHPD prior to approval of the construction documents. C. Retain the functional program with other design data to facilitate future alterations, additions, and program changes.		
<input type="checkbox"/>	3. Nomenclature in the functional program. A. The names for spaces and departments used in the functional program shall be consistent with those used in the California Building Code. If acronyms are used, they should be defined clearly. B. The names and spaces indicated in the functional program shall also be consistent with those used on submitted floor plans.		

(b) Functional program executive summary.	
1. Purpose of the project.	
<input type="checkbox"/>	A. The narrative shall describe the services to be provided, expanded, or eliminated by the proposed project.
<input type="checkbox"/>	B. The narrative shall describe the intent of the project and how the proposed modifications will address the intent.
2. Project type and size.	
<input type="checkbox"/>	A. The type of health care facility(ies) proposed for the project shall be identified as defined by the California Building Code.
<input type="checkbox"/>	B. Project size in square footage (new construction and renovation) and number of stories shall be provided.
3. Construction type/occupancy and building systems.	
<input type="checkbox"/>	A. New construction. If the proposed project is new construction that is not dependent on or attached to an existing structure, the following shall be included:
<input type="checkbox"/>	(1) A description of construction type(s) for the proposed project.
<input type="checkbox"/>	(2) A description of proposed occupancy(ies) and, if applicable, existing occupancy(ies).
<input type="checkbox"/>	(3) A description of proposed engineering systems.
<input type="checkbox"/>	(4) A description of proposed fire protection systems.
<input type="checkbox"/>	B. Renovation. For a project that is a renovation of, or addition to, an existing building, the following shall be included in the project narrative:
<input type="checkbox"/>	(1) A description of the existing construction type and the construction type for any proposed renovations or additions shall be described.
<input type="checkbox"/>	(2) A general description of existing engineering systems serving project and how these systems will be modified, extended, augmented, or replaced by the proposed project.
<input type="checkbox"/>	(3) A general description of existing fire protection systems serving the area of the building affected by the proposed project and how these systems will be modified, extended, augmented, or replaced by the proposed project.

(c) Functional program content. The functional program for the project shall include the following:	
1. Purpose of the project.	
<input type="checkbox"/>	The physical, environmental, or operational factors, or combination thereof, driving the need for the project and how the completed project will address these issues shall be described.
2. Project components and scope.	
<input type="checkbox"/>	A. The department(s) affected by the project shall be identified.
<input type="checkbox"/>	B. The services and project components required shall be described.
3. Indirect support functions.	
<input type="checkbox"/>	The increased (or decreased) demands throughout, workloads, staffing requirements, etc., imposed on support functions affected by the project shall be described. (These functions may or may not reside adjacent to or in the same building or facility with the project.)
4. Operational requirements.	
<input type="checkbox"/>	The operational requirements, which include but are not limited to the following, shall be described:
<input type="checkbox"/>	A. Projected operational use and demand loading for affected departments and/or project components.
<input type="checkbox"/>	B. Relevant operational circulation patterns, including staff, family/visitor, and materials movement.
<input type="checkbox"/>	C. Departmental operational relationships and required adjacencies.
5. Environment of care requirements.	
<input type="checkbox"/>	The functional program shall describe the functional requirements and relationship between the following environment of care components and key elements of the physical environment:
<input type="checkbox"/>	A. Delivery of care model (concepts).

<input type="checkbox"/>	(1) A description of the delivery of care model, including any unique features.
<input type="checkbox"/>	(2) A description of the physical elements and key functional relationships necessary to support the intended delivery of care model.
<input type="checkbox"/>	B. Patients, visitors, physicians, and staff accommodation and flow. Design criteria for the following shall be described:
<input type="checkbox"/>	(1) The physical environment necessary to accommodate facility users and administration of the delivery of care model.
<input type="checkbox"/>	(2) The physical environment (including travel paths, desired amenities and separation of users and workflow) necessary to create operational efficiencies and facilitate ease of use by patients, families, visitors, staff, and physicians.
<input type="checkbox"/>	C. Building infrastructure and systems design criteria.
	Design criteria for the physical environment necessary to support organizational, technological, and building systems that facilitate the delivery of care model shall be described.
<input type="checkbox"/>	D. Physical environment.
	Descriptions of and/or design criteria for the following shall be provided:
<input type="checkbox"/>	(1) Light and views – How the use and availability of natural light, illumination, and views are to be considered in the design of the physical environment.
<input type="checkbox"/>	(2) Wayfinding.
<input type="checkbox"/>	(3) Control of environment – How, by what means, and to what extent users of the finished project are able to control their environment. A. The departments(s) affected by the project shall be identified.
<input type="checkbox"/>	(4) Privacy and confidentiality – How the privacy and confidentiality of the users of the finished project are to be protected.
<input type="checkbox"/>	(5) Security – How the safety and security of patients or residents, staff, and visitors shall be addressed in the overall planning of the facility consistent with the functional program.
<input type="checkbox"/>	(6) Architectural details, surfaces, and furnishing characteristics and criteria.
<input type="checkbox"/>	(7) Cultural responsiveness – How the project addresses and/or responds to local or regional cultural considerations.
<input type="checkbox"/>	(8) Views of, and access to, nature.

6. Architectural space and equipment requirements.	
<input type="checkbox"/>	A. Space list.
<input type="checkbox"/>	(1) The functional program shall contain a list organized by department or other appropriate functional unit that shows each room in the proposed project, indicating its size by gross floor area and clear floor area.
<input type="checkbox"/>	(2) The space list shall indicate the spaces to which the following components, if required, are assigned:
<input type="checkbox"/>	(a) Fixed and movable medial equipment.
<input type="checkbox"/>	(b) Furnishings and fixtures.
<input type="checkbox"/>	(c) Technology provisions.
<input type="checkbox"/>	B. Area.
<input type="checkbox"/>	(1) Gross floor area for the project shall be aggregated by department, and appropriate multiplying factors shall be applied to reflect circulation and wall thicknesses within the department or functional area. This result shall be referred to as department gross square footage (DGSF).
<input type="checkbox"/>	(2) DGSF for the project shall be aggregated, and appropriate multiplying factors shall be applied to reflect inter-departmental circulation, exterior wall thickness, engineering spaces, general storage spaces, vertical circulation, and any other areas not included within the intra-department calculations. This result shall be referred to as building gross square footage (BGSF) and shall reflect the overall size of the project.
7. Technology requirements.	
<input type="checkbox"/>	Technology systems for the project shall be identified to serve as a basis for project coordination and budgeting.
<input type="checkbox"/>	A. Any technology systems integration strategy shall be defined.
<input type="checkbox"/>	B. Department and room specific detail for system and device deployment shall be developed.
8. Short- and long-term planning considerations.	
<input type="checkbox"/>	A statement addressing accommodations for the following, as appropriate for the project shall be included.
<input type="checkbox"/>	A. Future growth.
<input type="checkbox"/>	B. Impact on existing adjacent facilities.

<input type="checkbox"/>	C. Impact on existing operations and departments.
<input type="checkbox"/>	D. Flexibility.
9. Patient safety risk assessment.	
<input type="checkbox"/>	Projects associated with acute psychiatric hospitals, acute psychiatric nursing units in general acute-care hospitals, and special treatment program service units in skilled nursing facilities shall include a Patient Safety Risk Assessment. At a minimum, a Behavioral and Mental Health Risk Assessment shall be addressed as part of the Patient Safety Risk Assessment. The Patient Safety Risk Assessment shall be subject to review and approval by the California Department of Public Health.
<input type="checkbox"/>	A. Behavioral and mental health risk assessment.
<input type="checkbox"/>	A Behavioral and Mental Health Risk Assessment shall be prepared for all acute psychiatric hospitals, psychiatric nursing units within general acute-care hospitals, and special treatment program units in skilled nursing facilities. The risk assessment shall include evaluation of the population at risk and the nature and scope of the project, taking into account the model of care and operational considerations, and proposed built environment solutions to mitigate potential risks and hazards.
<input type="checkbox"/>	B. Behavioral and mental health elements (psychiatric patient injury and suicide prevention).
	The safety risk assessment report shall identify areas that will serve patients at risk of mental health injury and suicide.
<input type="checkbox"/>	C. Behavioral and mental health response.
<input type="checkbox"/>	(1) The safety risk assessment team shall identify mitigating features for the identified at-risk locations.
<input type="checkbox"/>	(2) The design of behavioral and mental health patient care settings shall address the need for a safe treatment environment for those who may present unique challenges and risks as a result of their mental condition.
<input type="checkbox"/>	(i) The patient environment shall be designed to protect the privacy, dignity, and health of patients and address the potential risks related to patient elopement; and harm to self, to others, and to the environment.
<input type="checkbox"/>	(ii) The design of behavioral/mental health patient areas shall accommodate the need for clinical and security resources.

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APPENDIX B EXAMPLES OF SUCCESSFUL FUNCTIONAL PROGRAMS

1. City's Edge Hospital – New hospital building [OSHPD 1]

This functional program is clear and concise.

The full text of this functional program example can be accessed through:
<https://hcai.ca.gov/document/example-1-citys-edge-hospital-new-hospital-building-oshpd-1>

2. Southern City Hospital – Surgical department remodel [OSHPD 1]

This functional program is clear and concise.

The full text of this functional program example can be accessed through:
<https://hcai.ca.gov/document/example-2-southern-city-hospital-surgical-department-remodel-oshpd-1>

3. New acute psychiatric hospital [OSHPD 5] – conversion from SNF

This functional program is to convert SNF beds to a new psychiatric hospital. The functional program is written in a table format that includes summary of codes project description. It is clear and easy to review. The functional program also includes a risk assessment

The full text of this functional program example can be accessed through:
<https://hcai.ca.gov/document/example-3-new-acute-psychiatric-hospital-oshpd-5>

4. New skilled nursing facility with special treatment program [OSHPD 2] – new building addition

This functional program outlines applicable codes with narratives. The functional program includes a Behavioral and Mental Health Risk Assessment.

The full text of this functional program example can be accessed through:
<https://hcai.ca.gov/document/example-4-new-skilled-nursing-facility-with-special-treatment-program-oshpd-2>

5. New Nuclear Medicine Room

This project proposes installing a new nuclear medicine room in a previously approved space. The nuclear medicine procedure room was approved a few code cycles earlier when there was no requirement for this equipment. This is a good

example of a functional program, including the previously approved HCAI project number, a floor plan, and a detailed code comparison analysis.

The full text of this functional program example can be accessed through:
<https://hcai.ca.gov/document/example-5-new-nuclear-medicine-room>

Board Rosters

June 2025

COMMITTEE LIST

BOARD MEMBERSHIP

CONSULTING COMMITTEE MEMBERS

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HOSPITAL BUILDING SAFETY BOARD 2025 COMMITTEES

BOARD PROCEDURES COMMITTEE (AD HOC)

<u>Committee Members:</u> Michael Foulkes, Chair Gary Dunger, Vice-Chair Louise Belair Scott Mackey Jim Malley	<u>HCAI Representatives:</u> Joe LaBrie <u>Meeting Dates:</u>
Focus/Goals: <ul style="list-style-type: none"> • Meet as needed for: <ul style="list-style-type: none"> ○ Policies and Procedures updates ○ Nominating committee, training/onboarding members 	

CODES AND PROCESSES COMMITTEE

<u>Committee Members:</u> Michael O'Connor, Chair Teresa Endres, Vice-Chair Cody Bartley Louise Belair Jennifer Cox Michael Davis Gary Dunger John Griffiths Scott Mackey Jim Malley Farzad Naeim Carl Newth <u>Consulting Members:</u> Mark Hershberg Kelly Martinez Belinda Young	<u>HCAI Representatives:</u> Brett Beekman Larry Enright Joe LaBrie Roy Lobo Bob Lyons Mia Marvelli Diana Navarro Jamie Schnick Nanci Timmins <u>Meeting Dates:</u> February 19 CANCELLED May 7 September 10
Focus/Goals: <ul style="list-style-type: none"> • Update CANs and PINs to code (ongoing) • Evaluate standard details for SNFs • Title 24 <ul style="list-style-type: none"> ○ Identify code modifications to support implementation of building standards code 	

EDUCATION AND OUTREACH COMMITTEE

Committee Members:

Scott Mackey, Chair
Cody Bartley, Vice-Chair
Louise Belair
Janice Cheung
Michael Davis
Gary Dunger
Teresa Endres
Bert Hurlbut
Courtney Johnson
Jim Malley

Consulting Members:

Kelly Martinez
Bruce Rainey
Belinda Young
Bill Zellmer

HCAI Representatives:

Hussain Bhatia
Monica Colosi
Darren Graves
Joe LaBrie
Mia Marvelli
Jamie Schnick
Nanci Timmins

Meeting Dates:

February 13
April 23
August 6
September 24

Focus/Goals:

- Support the development of webinars
- Develop a regular curriculum and predictable calendar for webinars
- Revisions to “Guide for Working on OSHPD Projects – Tips from the Experts”
- Webinars for Imaging Classes 1, 2, & 3
- Emergency Design Guide (seminar TBD)
- Tips on how to work with OSHPD in the field (seminar TBD)
- Inspect-to-Pass (webinar)
- Work with Instrumentation Committee regarding webinar/seminar on instrumentation white paper

“COLLABORATIVE INSPECTION APPROACH TO FIELD INSPECTIONS” WEBINAR DEVELOPMENT SUBCOMMITTEE

Subcommittee Members:

Michael Davis, Chair
Cody Bartley, Vice-Chair
Gary Dunger
Bert Hurlbut
Scott Mackey

HCAI Representatives:

Monica Colosi
Joe LaBrie

Meeting Dates:

February 27
March 27
April 24
June 19

Focus/Goals:

- Develop content for presentation for Collaborative Approach to Field Inspections webinar
- Discuss next steps to finalize webinar

ENERGY CONSERVATION AND MANAGEMENT COMMITTEE

Committee Members:

Cody Bartley, Chair
John Griffiths, Vice-Chair
Louise Belair
David Bliss
Janice Cheung
Jennifer Cox
Gary Dunger
Michael Foulkes
Scott Mackey
Carl Newth

HCAI Representatives:

Larry Enright
Mia Marvelli
Jamie Schnick
Nanci Timmins

Meeting Dates:

April 2
~~October 8~~ RESCHEDULED
October 9

Consulting Members:

Eric Johnson
David Lockhart

Focus/Goals:

- Identify HCAI research projects for energy conservation, reduction of carbon footprint, and cost savings while maintaining health and safety alternate energy sources
 - Consider systems and monitoring devices for other environmental conditions
- Pursue indoor air quality at a lesser energy cost for healthcare
- Optimize water usage in healthcare environments; Efficiency/Sustainability
- Explore emerging technologies that help reduce the carbon footprint for healthcare facilities and implementation relative to code implementation of emerging tools relative to the code
- Explore wastewater solutions

INSTRUMENTATION COMMITTEE

Committee Members:

Farzad Naeim, Chair
Martin Hudson, Vice-Chair
Courtney Johnson
Jim Malley
Jennifer Thornburg

HCAI Representatives:

Hussain Bhatia
Erol Kalkan
Roy Lobo
Ali Sumer

Meeting Dates:

January 28
October 28

Consulting Members:

Hamid Haddadi
Moh Huang
Tony Shakal

Focus/Goals:

- Continue working with HCAI staff on scheduled instrumentation installations
- Consider other systems and monitoring devices
- Collaborate with CGS on prioritizing upgrades to existing instrumentation
- Work with EO Committee regarding webinar/seminar on instrumentation white paper

STRUCTURAL AND NON-STRUCTURAL REGULATIONS COMMITTEE

Committee Members:

Jim Malley, Chair
Farzad Naeim, Vice-Chair
Cody Bartley
Louise Belair
Michael Davis
Teresa Endres
Martin Hudson
Courtney Johnson
Jennifer Thornburg

Consulting Member

Mark Hershberg

HCAI Representatives:

Joe LaBrie
Roy Lobo
Mia Marvelli
Jamie Schnick
Ali Sumer

Meeting Dates:

March 12
October 22

Focus/Goals:

- Support HCAI with review of code changes (ongoing)
- Support HCAI with review of new/revised PINs, CANs, and OPDs (ongoing)
- Implementation of SPC-4D and NPC-4D
- Develop pre-approved details
- Seismic compliance issues related to NPC-3, NPC-4D, and NPC-5; streamlining the process for compliance to meet the statutory and regulatory deadline
- Review of Code amendments that are now obsolete as those issues have been addressed in model code
- Develop and implement procedures and enforceable building standards to ensure safe and sustainable healthcare facilities
- Consider new products, materials and methods that would benefit the public by early adoption rather than waiting for their incorporation in the building code

TECHNOLOGY AND RESEARCH COMMITTEE

Committee Members:

Gary Dunger, Chair
Cody Bartley, Vice-Chair
David Bliss
Janice Cheung
Jennifer Cox
Teresa Endres
Michael Foulkes
John Griffiths
Bert Hurlbut
Scott Mackey
Michael O'Connor

HCAI Representatives:

Hussain Bhatia
Larry Enright
Joe LaBrie
Jamie Schnick
Nanci Timmins

Meeting Dates:

June 18
November 5

Consulting Members:

Benjamin Broder
Eric Johnson
Belinda Young

Focus/Goals:

- Explore subjects of telemedicine and robotics
- Discuss the effect of technologies on healthcare equity
- Address how to regulate remote services (e.g., medical records, web-based nurse call, off-site server farms, etc.)
 - Define what is a medical record
 - Monitor CDPH electronic health records redundancy issues in the event of power failure and watch for potential effects to code
 - Invite industry members to address/inform the committee on the reliability of cloud-based systems (fire alarm, energy monitoring, etc.)

FULL BOARD MEETING DATES

June 3 and 4 – Los Angeles
December 10 and 11 – Sacramento

HOSPITAL BUILDING SAFETY BOARD MEMBERSHIP

Appointed Members (Appointed by HCAI Director)

MEMBERSHIP CATEGORIES	NAMES	APPNTMNT DATE	TERM EXP DATE	TERM OF SERVICE
2 structural engineers	James O. Malley*	8/2020	8/2028	2nd term
	Farzad Naeim	8/2021	8/2025	1st term
2 architects	Teresa Endres	8/2023	8/2027	1st term
	Scott Mackey**	8/2021	8/2025	1st term
1 engineering geologist	Courtney Johnson	4/2024	4/2028	1st term
1 geotechnical engineer	Martin B. Hudson	12/2023	12/2027	1st term
1 mechanical engineer	Louise Belair	6/2017	6/2025	2nd term
1 electrical engineer	John Griffiths	8/2022	8/2026	1st term
1 hospital facilities manager	Gary Dunger	12/2022	12/2026	1st term
1 local building official	Carl Newth	8/2024	8/2028	1st term
1 general contractor	Cody Bartley	8/2022	8/2026	1st term
1 fire/life safety representative	Janice Cheung	12/2023	12/2027	1st term
1 hospital inspector of record	Michael L. Davis	8/2023	8/2027	1st term
3 public members	VACANT	--	--	--
	Jennifer Cox	4/2024	4/2028	1st term
	D. Michael Foulkes	6/2017	6/2025	2nd term
TOTAL	16			

Ex-Officio Members

HCAI, Director	Elizabeth Landsberg	No Term of Office Stipulated
State Fire Marshal	Daniel Berlant Vickie Sakamoto (Delegate)	
State Geologist	Jeremy Lancaster Jennifer Thornburg (Delegate)	
Building Standards Commission, Executive Director	Stoyan Bumbalov Irina Brauzman (Delegate) Kevin Day (Delegate)	
Department of Public Health, Director	Dr. Erica Pan, MD, MPH, FIDSA, FAAP Nathaniel Gilmore (Delegate)	
OSHPD, Deputy Director	Chris Tokas	
TOTAL	6	

Director Appointed Ex-Officio Members (Serve at pleasure of Director)

3 members	David Bliss Bert Hurlbut Michael O'Connor	No Term of Office Stipulated
TOTAL	3	
TOTAL HBSB Members	25	

*Jim Malley: Chair 2025-2026 (1st term)

**Scott Mackey: Vice-Chair 2025-2026 (1st term)

May 2025

2025 CONSULTING COMMITTEE MEMBERS

<p>Benjamin Broder, MD, PhD, CPPS Kaiser Permanente/So. California 393 E. Walnut St. 3rd Floor NW Pasadena, CA 91188-8034 (626) 405-2501 Benjamin.I.Broder@kp.org <ul style="list-style-type: none"> Technology and Research Committee </p>	<p>Hamid Haddadi California Geological Survey 801 K Street, MS 13-35 Sacramento, CA 95814 (916) 322-9304 FAX: (916) 323-7778 Hamid.Haddadi@consrvation.ca.gov <ul style="list-style-type: none"> Instrumentation Committee </p>
<p>Mark Hershberg, SE KPFF Consulting Engineers 6080 Center Drive, Suite 300 Los Angeles, California 90045 (310) 665-1536 MHershberg@kpff-la.com <ul style="list-style-type: none"> Codes and Processes Committee Structural and Nonstructural Regulations Committee </p>	<p>Moh Huang California Geological Survey Moh.Huang@gmail.com <ul style="list-style-type: none"> Instrumentation Committee </p>
<p>Eric C. Johnson, PE President ECOM Engineering, Inc. 1796 Tribute Road, Suite 100 Sacramento, CA 95815 (916) 641-5600 ECJ@ecomeng.com <ul style="list-style-type: none"> Energy Conservation and Management Committee Technology and Research Committee </p>	<p>David Lockhart, CHFM, CEM National Facilities Services Kaiser Permanente 1600 Eureka Road Roseville, CA 95661 (916) 784-5280; tie-line (8-514) Dave.Lockhart@kp.org <ul style="list-style-type: none"> Energy Conservation and Management Committee </p>
<p>Kelly Martinez Co-founder Hallsta, Inc. PO Box 801238 Santa Clarita, CA 91381 (818) 400-0954 kelly@hallstainc.com <ul style="list-style-type: none"> Codes and Processes Committee Education and Outreach Committee </p>	<p>Bruce A. Rainey, MHA Vice President, Healthcare Global Solutions Director, Health Advisory Jacobs (760) 212-2438 (cell) <ul style="list-style-type: none"> Education and Outreach Committee </p>

2025 CONSULTING COMMITTEE MEMBERS

<p>Tony Shakal California Geological Survey Tshakal@pacbell.net <ul style="list-style-type: none"> Instrumentation Committee </p>	<p>Belinda Young Principal Hellmuth, Obata & Kassabaum, Inc. 1 Bush Street, Ste 200 San Francisco CA 94104 (415) 356-8741 belinda.young@hok.com <ul style="list-style-type: none"> Codes and Processes Committee Education and Outreach Committee Technology and Research Committee </p>
<p>Bill Zellmer, AIA, CASp Program Manager—Physical Access Compliance and Regulatory Affairs Sutter Health 2200 River Plaza Sacramento, CA 95833 (916) 216-3491 (cell) Zellmeb@sutterhealth.org <ul style="list-style-type: none"> Education and Outreach Committee </p>	