

**FINAL STATEMENT OF REASONS
FOR PROPOSED BUILDING STANDARDS OF THE
DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
REGARDING THE 2019 CALIFORNIA EXISTING BUILDING CODE
CALIFORNIA CODE OF REGULATIONS, TITLE 24, PART 10
(HCD 05/18)**

The Administrative Procedure Act requires that every agency shall maintain a file of each rulemaking that shall be deemed to be the record for that rulemaking proceeding. The rulemaking file shall include a Final Statement of Reasons. The Final Statement of Reasons shall be available to the public upon request when rulemaking action is being undertaken. The following are the reasons for proposing this particular rulemaking action:

UPDATES TO THE INITIAL STATEMENT OF REASONS:

Government Code Section 11346.9(a)(1) requires an update of the information contained in the Initial Statement of Reasons. If the update identifies any data or any technical, theoretical or empirical study, report, or similar document on which the state agency is relying that was not identified in the Initial Statement of Reasons, the state agency shall comply with Government Code Section 11347.1.

No data or any technical, theoretical or empirical study, report, or similar document on which the Department of Housing and Community Development (HCD) is relying has been added to the rulemaking file that was not identified in the Initial Statement of Reasons (ISOR). However, HCD has relied on a published code commentary which provides references for the proposed code adoptions:

- 2018 International Existing Building Code (IEBC) and Commentary published by the International Code Council (ICC), December 2018.

HCD has revised the Express Terms as originally proposed and provided for two additional 15-day public comment periods (December 19, 2018, to January 3, 2019; and February 21, 2019, to March 8, 2019). These changes were based on comments received during the California Building Standards Commission (CBSC) meeting on December 4, 2018, as well as during the two 15-day public comment periods.

MANDATE ON LOCAL AGENCIES OR SCHOOL DISTRICTS

Pursuant to Government Code Section 11346.9(a)(2), if the determination as to whether the proposed action would impose a mandate, the agency shall state whether the mandate is reimbursable pursuant to Part 7 of Division 4. If the agency finds that the mandate is not reimbursable, it shall state the reasons for the finding(s).

HCD has determined that the proposed regulatory action would not impose state-reimbursable mandates on local agencies or school districts.

OBJECTIONS OR RECOMMENDATIONS MADE REGARDING THE PROPOSED REGULATION(S).

Government Code Section 11346.9(a)(3) requires a summary of EACH objection or recommendation regarding the specific adoption, amendment, or repeal proposed, and an explanation of how the proposed action was changed to accommodate each objection or recommendation, or the reasons for making no change. This requirement applies only to objections or recommendations specifically directed at the agency's proposed action or to the procedures followed by the agency in proposing or adopting the action, or reasons for making no change. Irrelevant or repetitive comments may be aggregated and summarized as a group.

The text with proposed changes was made available to the public for a 45-day public comment period from **September 14, 2018**, to **October 29, 2018**.

There were no external public comments received during the 45-day public comment period. No public comment(s) related to the public comment period were received after the close of the public comment period.

HCD evaluated the 45-day Express Terms during the comment period and has formally submitted a comment letter to the CBSC indicating areas of possible revision during a subsequent public comment period.

The text with new revisions was made available to the public for a first 15-day public comment period from **December 19, 2018**, to **January 3, 2019**. The changes were based on comments received following the close of the first comment period and at the December 4, 2018, CBSC meeting. Six public comments were received during the 15 day comment period.

The text was modified for a second 15-day comment period based on comments received following the close of first 15-day comment period and at the January 15-16, 2018, CBSC meeting. HCD held a second 15-day public comment period from **February 21, 2019**, to **March 8, 2019**. Three public comments were received during the second 15-day public comment period.

The following is HCD's summary of, and responses to comments, specifically directed at HCD's proposals for the 2019 California Existing Building Code (CEBC). A list of acronyms is included for reader convenience.

Acronyms:

AB	Assembly Bill
CAC	Code Advisory Committee of the California Building Standards Commission
CBSC	California Building Standards Commission
CEBC	California Existing Building Code
HCD	Department of Housing and Community Development
HSC	Health and Safety Code
IBC	International Building Code

ICC	International Code Council (model code writing body)
IEBC	International Existing Building Code (model code)
ISOR	Initial Statement of Reasons
SB	Senate Bill
SHL	State Housing Law

COMMENTS RECEIVED DURING THE 45-DAY PUBLIC COMMENT PERIOD ARE LISTED BELOW.

1. COMMENTER: Emily Withers, Codes and Standards Administrator II
 Division of Codes and Standards
 Department of Housing and Community Development
 2020 W. El Camino Avenue, Suite 200
 Sacramento, CA 95833

COMMENT 1A:

Section 1.8.4.1 Permits: Senate Bill 1226 (Chapter 1010, Statutes of 2018) added new HSC Section 17958.12 to the SHL. This section provides recognition of the existing discretion of enforcing agencies to apply building standards in effect at the time of a building's construction and to grant case-by-case approvals for use of alternate methods of construction or use of materials. Section 17958.12(b) also requires HCD to propose the adoption of a building standard to the CBSC to authorize enforcing agencies to determine the date of construction of existing residential units without existing building permits and to issue retroactive building permits.

HCD RESPONSE:

Section 1.8.4.1 requires written construction permits prior to erection, construction, reconstruction, installation, moving or alteration of any building or structure. SB 1226's provisions for retroactive permits for existing residential buildings would introduce conflict between statute and Section 1.8.4.1. It was HCD's intent to introduce an exception to this section to provide for the use of retroactive permits as determined by the local enforcing agency. However, the CBSC has determined that the inclusion of this exception is not sufficiently related to HCD's initial proposal and did not allow HCD to proceed with another 15-day or 45-day public comment period on this issue. In addition, the CBSC determined that the enactment of SB 1226 occurred too late in the code adoption cycle to ensure sufficient pre-cycle participation, CAC review and recommendation, and CBSC processing for inclusion in the 2019 CEBC. HCD plans to revisit the inclusion of SB 1226 provisions in the next code adoption cycle.

COMMENT 1B:

Section 109 Inspections: SB 721 (Chapter 445, Statutes of 2018) adds statutory text to the HSC requiring post-construction inspections of exterior elevated elements, as defined, for multifamily dwelling units. This bill was signed by the Governor on September 17, 2018, and will be operative on January 1, 2019, which is prior to the

effective date of the 2019 CEBC. Therefore, it is HCD's intent to provide reference to the mandated inspection requirements in this bill in the 2019 CEBC.

HCD RESPONSE:

The CBSC has determined that the inclusion of a new reference to the mandated post-construction inspections in the HSC is not sufficiently related to HCD's initial proposal and did not allow HCD to proceed with another 15-day or 45-day public comment period on this issue. In addition, the CBSC determined that the enactment of SB 721 occurred too late in the code adoption cycle to ensure sufficient pre-cycle participation, CAC review and recommendation, and CBSC processing for inclusion in the 2019 CEBC. HCD plans to revisit the inclusion of SB 721 provisions in the next code adoption cycle.

COMMENTS RECEIVED DURING THE DECEMBER 4, 2018, CBSC MEETING ARE LISTED BELOW.

2. COMMENTER: Kent Sasaki, P.E., S.E. #3972, CBSC Commissioner
(written statement and discussion)
Gwenyth R. Searer, P.E., S.E., Principal
Wiss, Janney, Elstner Associates, Inc.
Engineers | Architects | Materials Scientists
2000 Powell Street, Suite 1650, Emeryville, CA 94608
(phone comment)

COMMENT 2A:

Comment: Current provisions in state law and in the 2016 CEBC allow damage to residential structures to be repaired using like materials and like construction. Essentially repairs do not need to conform to current code requirements for new buildings. The changes that HCD is proposing remove the provisions that allow residential structures to be repaired with like materials and like construction, which is in direct conflict with state law, and will result in huge adverse fiscal impacts to homeowners, apartment owners, building owners, and the State of California. This is particularly, now with the recent wildfires, where literally thousands of houses need to be repaired or reconstructed.

HCD Response: HCD thanks Commissioner Sasaki and Gwenyth Searer for their detailed comments. Unfortunately, the comments were submitted to HCD at the last minute when the HCD proposals for the 2019 CEBC were placed on the agenda for the final CBSC approval meeting on December 2018. This left inadequate time to re-engage stakeholders, run proposals past the CAC and conduct a 45-day public review period for substantive changes.

HCD did not intend to remove existing provisions, allowing residential structures to be repaired with like materials and like construction. HCD clarifies in the ISOR that the existing California amendments in Chapter 4 of the 2016 CEBC are proposed for repeal because these model code sections no longer exist in the 2018 IEBC; the model code adequately picked up; or amendments are proposed to be relocated to different

chapters. It is HCD's analysis that the model code Sections 301.3 (exception), 302.4, and 302.5 (second sentence) already address the extension of original materials and the use of original methods of construction, and these sections do not conflict with the HSC. The proposal to adopt the model code is in line with the California Building Standards Law (BSL), Nine-Point Criteria in HSC Section 18930(a), Criteria 7, to incorporate model codes where appropriate.

HCD included a note in the ISOR that states:

HCD did not adopt these sections during the 2015 Triennial Code Adoption Cycle. However, after further review, HCD considered that these sections, if adopted, would be beneficial for the code users, and would not conflict with the SHL. Although the SHL allows the extension of original materials and use of original methods of construction, structural damage causes the building to become a substandard building. HSC Section 17920.3(b) also identifies structural members which may contribute to a substandard condition.

HCD's amendment in Section 301.3 is intended for alterations and not additions. It should also refer to repairs. HCD proposes relocating the amendment identified as Exception 2, to Section 302.5 to clarify application to both alterations and repairs.

Note: 2018 IEBC sections (*italics as published*) and HSC Section 17920.3; underscore used for emphasis

301.3 Alteration, addition or change of occupancy. The *alteration, addition or change of occupancy* of all *existing buildings* shall comply with one of the methods listed in Section 301.3.1, 301.3.2 or 301.3.3 as selected by the applicant. Sections 301.3.1 through 301.3.3 shall not be applied in combination with each other.

Exception: Subject to the approval of the *code official*, alterations complying with the laws in existence at the time the building or the affected portion of the building was built shall be considered in compliance with the provisions of this code. New structural members added as part of the *alteration* shall comply with the *International Building Code*. This exception shall not apply to alterations that constitute substantial improvement in *flood hazard areas*, which shall comply with Section 503.2, 701.3 or 1301.3.3. This exception shall not apply to the structural provisions of Chapter 5 or to the structural provisions of Sections 706, 806 and 906.

302.4 Existing materials. Materials already in use in a building in compliance with requirements or approvals in effect at the time of their erection or installation shall be permitted to remain in use unless determined by the building official to be unsafe.

302.5 New and replacement materials. Except as otherwise required or permitted by this code, materials permitted by the applicable code for new construction shall be used. Like materials shall be permitted for repairs and alterations, provided that unsafe conditions are not created. Hazardous materials shall not be used where the

code for new construction would not permit their use in buildings of similar occupancy, purpose and location.

HSC 17920.3 Substandard buildings

...

(b) Structural hazards shall include, but not be limited to, the following:

- (1) Deteriorated or inadequate foundations.
- (2) Defective or deteriorated flooring or floor supports.
- (3) Flooring or floor supports of insufficient size to carry imposed loads with safety.
- (4) Members of walls, partitions, or other vertical supports that split, lean, list, or buckle due to defective material or deterioration.
- (5) Members of walls, partitions, or other vertical supports that are of insufficient size to carry imposed loads with safety.
- (6) Members of ceilings, roofs, ceiling and roof supports, or other horizontal members which sag, split, or buckle due to defective material or deterioration.
- (7) Members of ceilings, roofs, ceiling and roof supports, or other horizontal members that are of insufficient size to carry imposed loads with safety.
- (8) Fireplaces or chimneys which list, bulge, or settle due to defective material or deterioration.
- (9) Fireplaces or chimneys which are of insufficient size or strength to carry imposed loads with safety.

...

(o) Inadequate structural resistance to horizontal forces.

COMMENT 2B: Three specified provisions (401.2.1, 403.1.1, 404.1.1 from the 2016 CEBC) should be brought forward into Sections 302.4 Existing materials, Section 401 General and Section 503.1 General.

HCD Response: Section 302.4, proposed for adoption by HCD without changes, permits the continued use of materials compliant at time of erection or installation to remain in use. The retention of original materials is already allowed, an amendment seems unnecessary for this section.

Relocating the text of the existing amendment (shown in double underscore) into Section 302.5 (New and replacement materials) should have the same clarification since it is a general section related to repairs and alterations. It is applicable to all three compliance methods – prescriptive, performance, and work area (performance and work area methods not adopted by HCD).

302.5 New and replacement materials. Except as otherwise required or permitted by this code, materials permitted by the applicable code for new construction shall be used. Like materials shall be permitted for repairs and alterations, provided that unsafe conditions are not created. Hazardous materials shall not be used where the

code for new construction would not permit their use in buildings of similar occupancy, purpose and location.

(HCD 1) Local ordinances or regulations shall permit the replacement, retention and extension of original materials, and the use of original methods of construction, for any building or accessory structure, provided such building or structure complied with the building code provisions in effect at the time of original construction and the building or accessory structure does not become or continue to be a substandard building. For additional information, see Health and Safety Code Sections 17912, 17920.3, 17922(d), 17922.3, 17958.8 and 17958.9.

The most logical section for duplicating the HCD amendment above in Chapter 4 would be in Section 402 Building Elements and Materials. HCD believes the duplication of the language already included in Section 302.5 as a general provision will not be beneficial and may conflict with the Building Standards Law Nine-Point Criteria in HSC Section 18930(a), Criteria 1 (to not duplicate other building standards). To avoid the conflict, HCD modified the final express terms (see second 15-day Express Terms Sections 402.2 and 402.3) by providing references to Sections 302.4 and 302.5, addressing existing materials.

Chapter 5 provides measures for the prescriptive compliance method; the requirements for alterations are in Section 503. Section 503.1 (General) clarifies that alterations are required to comply with the California Building Code (CBC), EXCEPT as provided by Sections 302.4 and 302.5. Section 302.4 allows the use of existing materials; Section 302.5 (including HCD's newly proposed amendment) allows like materials for repairs and alterations. Section 301.3 also provides an exception that allows alterations complying with the laws in existence at the time the building or the affected portion of the building was built to be considered in compliance with the provisions of CEBC. It is unnecessary to duplicate the text as it is proposed in Section 302.5. Since Section 503.1 already refers to the provisions addressing "in-kind" replacement; including HCD amendment, any additional language would be confusing for the code users. A proposal to adopt duplicative text may conflict with Building Standards Law Nine-Point Criteria in HSC Section 18930(a), Criteria 1, to not duplicate other building standards.

COMMENT 2C: The upgrade triggers in Section 405 Structural, as well as the definition of "substantial structural damage", cannot be adopted by HCD without conflicting with state law. The matrix tables should be modified to show that these sections are not adopted.

HCD Response: HCD's ISOR acknowledges the adoption of new sections and subsections in Chapter 4, including Section 405. The Matrix Adoption Tables will be developed for publication after CBSC approval of sections proposed for adoption.

As noted in the ISOR:

HCD did not adopt all chapters from the 2015 IEBC during the 2015 Triennial Code Adoption Cycle. Due to time constraints for coordination with stakeholders and other state agencies, HCD's intent was to take the existing regulations from CBC Chapter 34 and to relocate them into the 2016 CEBC without causing any change in regulatory effect from the 2013 CBC. However, HCD promised to re-evaluate the 2018 IEBC and adopt specific chapters or sections, if needed.

The requirements for repairs are in the 2016 CEBC, Chapter 6, but are not adopted by HCD nor printed in the code. However, HCD believes that the 2018 IEBC, Chapter 4 Repairs, provides important information for design and enforcement, and is proposing it for adoption with amendments.

In addition, although the SHL allows the extension of original materials and use of original methods of construction, structural damage causes the building to become a substandard building. Responses to adoption of subsections in Section 405 including "upgrade triggers" follow. Subsection text is included to provide context for HCD responses.

405.2.1 Repairs for less than substantial structural damage. Unless otherwise required by this section, for damage less than substantial structural damage, the damaged elements shall be permitted to be restored to their predamage condition.

HCD Response: This section allows buildings with less than substantial structural damage (as defined) to be restored to their predamage condition using materials and strengths that existed prior to the damage (in-kind replacement). There is no conflict with the HSC.

The only exception is damage due to snow loads, as addressed in Section 405.2.1.1, and possibly structures that have sustained disproportionate earthquake damage in Seismic Design Category D, E or F, as addressed in Section 405.2.2.

405.2.1.1 Snow damage. Structural components whose damage was caused by or related to snow load effects shall be repaired, replaced or altered to satisfy the requirements of Section 1608 of the International Building Code.

HCD Response: This section requires structural components damaged by snow load to be repaired in compliance with the CBC. It is understandable that if a structural member cannot withstand a snow load, typical for local climatic conditions, the building is a substandard building based on HSC Section 17920.3(b).

HSC Section 17920.3(b) classifies a building with structural damage as a "structural hazard," and Item 7 of the list of potential substandard conditions specifically states, "Members of ceilings, roofs, ceiling and roof supports, or other horizontal members that are of insufficient size to carry imposed loads with safety." In our estimate, there may be a conflict with the HSC if this section is not adopted. It is also important to adopt this model code section when taking into account the climate change and outdated design criteria in many local jurisdictions in California.

Based upon the ICC rulemaking documents, the reason for adopting this new section in the 2018 IEBC, is the difference between snow loads (especially with the effects of climate change) and dead, live, earthquake and wind loads otherwise addressed in Chapter 4. Existing framing carrying dead and live loads generally does not require upgrades even when it is nonconforming because it has a history of adequate service; however, design level snow loads do not have that history. Unlike wind or earthquake loads, snow loads at damaging or design levels are likely to occur again within a few years; thus, it is folly to allow deficient components to be repaired only to the state in which we can expect them to be damaged again next winter. (See also 2018 IEBC Code and Commentary)

405.2.2 Disproportionate earthquake damage. A building assigned to Seismic Design Category D, E or F that has sustained disproportionate earthquake damage shall be subject to the requirements for buildings with substantial structural damage to vertical elements of the lateral force-resisting system.

HCD Response: This section is applicable to vulnerable buildings, and potentially would require these buildings to be evaluated and possibly upgraded. The disproportionate earthquake damage, as defined, would be applicable only where a building is damaged by a very small earthquake. This damage is an indicator of severe damage, and possibly collapse, in a future larger event. Section 405.2.2 applies only to structures in Seismic Design Category D, E, and F (majority of California is in D and E), and where the shaking is less than 40 percent of the design loads for new buildings. One- and two-family dwellings are completely exempt, as they are exempt from retrofits triggered by substantial structural damage. Per reference to Section 405.2.3.

This model code section seems to align with the intent of HSC Sections 17920.3(b) and 17920.3(o). Section 17920.3(b) classifies a building with structural damage as a “structural hazard,” and therefore, as a substandard building. Section 17920.3(o) classifies a building with inadequate structural resistance to horizontal forces as a substandard building. Therefore, HCD does not see a conflict with the HSC; however, believes there will be a conflict if this section is not adopted.

Section 405.2.2 is new in the 2018 IEBC, and based upon the ICC rulemaking documents, was adopted to provide additional measures for vulnerable buildings. The basic intent of the IEBC is to identify vulnerable buildings at critical points in their useful lives and to require evaluation and possibly upgrade. Sections 405.2.3 and 405.2.4 address substantially damaged buildings and require a seismic upgrade for those found to be especially vulnerable. The high damage threshold (33 percent capacity loss) is appropriate, but it will only be reached where the earthquake shaking was high. This new section uses an earthquake as an opportunity to find and proactively improve the most vulnerable buildings (vulnerable to disproportionate earthquake damage). The disproportionate earthquake damage exists where the building has significant damage in even a very small earthquake, and this damage is an indicator of severe damage, possibly collapse, in a larger future event. Where disproportionate earthquake damage is found, the building would be subject to

evaluation with reduced loads and possibly a required retrofit, again with reduced loads. (See also 2018 IEBC and Commentary)

Important items to note about this section are summarized below:

- This section only applies in Seismic Design Category D, E and F.
- This section only applies where the measured shaking is less than 40 percent of design basis loads.
- This section applies where, even under these small loads, the damage is significant. The proposed capacity loss threshold of 10 percent might appear small, but in Seismic Design Category D, E and F, with spectral acceleration less than 0.4g, any decent building should have zero structural damage.
- Reduced loads are allowed for any disproportionate earthquake damage-triggered evaluation or retrofit.

405.2.3 Substantial structural damage to vertical elements of the lateral force-resisting system. A building that has sustained substantial structural damage to the vertical elements of its lateral force-resisting system shall be evaluated in accordance with Section 405.2.3.1, and either repaired in accordance with Section 405.2.3.2 or repaired and retrofitted in accordance with Section 405.2.3.3, depending on the results of the evaluation.

Exceptions:

1. Buildings assigned to Seismic Design Category A, B or C whose substantial structural damage was not caused by earthquake need not be evaluated or retrofitted for load combinations that include earthquake effects.
2. One- and two-family dwellings need not be evaluated or retrofitted for load combinations that include earthquake effects.

Note: The definition of “Substantial Structural Damage” from the 2018 IEBC is provided below for context.

SUBSTANTIAL STRUCTURAL DAMAGE. A condition where any of the following apply:

1. The vertical elements of the lateral force-resisting system have suffered damage such that the lateral load-carrying capacity of any story in any horizontal direction has been reduced by more than 33 percent from its predamage condition.
2. The capacity of any vertical component carrying gravity load, or any group of such components, that has a tributary area more than 30 percent of the total area of the structure's floor(s) and roof(s) has been reduced more than 20 percent from its predamage condition, and the remaining capacity of such affected elements, with respect to all dead and live loads, is less than

75 percent of that required by the *International Building Code* for new buildings of similar structure, purpose and location.

3. The capacity of any structural component carrying snow load, or any group of such components, that supports more than 30 percent of the roof area of similar construction has been reduced more than 20 percent from its predamage condition, and the remaining capacity with respect to dead, live and snow loads is less than 75 percent of that required by the *International Building Code* for new buildings of similar structure, purpose and location.

HCD Response: This section requires an evaluation for substantial structural damage to the vertical elements of the lateral-force resisting system in any story. The evaluation is applicable to the entire building for wind and seismic loads (see Section 405.2.3.1). As per the ICC rulemaking documents, the emphasis is placed on vertical elements (such as walls and columns), rather than horizontal elements, because the vertical elements of the lateral-force-resisting system primarily determine the structure's response to earthquakes. Based on the result of this evaluation, the damaged buildings are required to comply with Sections 405.2.3.2 or 405.2.3.3. Both sections allow in-kind replacement if specific conditions are met.

Exception 1 is for buildings in areas of low or moderate seismicity (Seismic Design Category A, B or C), where the damage was not caused by an earthquake and, therefore, would not be required to be evaluated or rehabilitated for load combinations that include earthquake effects. Exception 2 is for one- and two-family dwellings, where the public risk is especially low even though the damage may be associated with earthquake effects.

405.2.3.1 Evaluation. The building shall be evaluated by a registered design professional, and the evaluation findings shall be submitted to the code official. The evaluation shall establish whether the damaged building, if repaired to its predamage state, would comply with the provisions of the International Building Code for load combinations that include wind or earthquake effects, except that the seismic forces shall be the reduced seismic forces.

HCD Response: This section requires evaluation by a registered design professional to determine if a damaged building can be repaired to its predamage state. Nevertheless, with or without this section, most of the local jurisdictions in California require evaluation by a registered design professional when major structural damage is present.

Based upon the ICC rulemaking documents, the approach of the 2018 IEBC is that structural upgrades should be relatively rare. In this section, specifically, a structural upgrade is only required when there is a substantial structural damage to the lateral system, and when the evaluation shows that the predamaged building was substandard. Therefore, it is clear that the 2019 IEBC and the HSC have the same intent – not to allow “in-kind” replacement for substandard buildings. (See also 2019 IEBC and Commentary)

405.2.3.2 Extent of repair for compliant buildings. If the evaluation establishes that the building in its predamage condition complies with the provisions of Section 405.2.3.1, then the damaged elements shall be permitted to be restored to their predamage condition.

HCD Response: This section allows in-kind replacement; therefore, it does not conflict with the HSC. See also HCD response for Sections 405.2.3 and 405.2.3.1.

405.2.3.3 Extent of repair for noncompliant buildings. If the evaluation does not establish that the building in its predamage condition complies with the provisions of Section 405.2.3.1, then the building shall be retrofitted to comply with the provisions of this section. The wind loads for the repair and retrofit shall be those required by the building code in effect at the time of original construction, unless the damage was caused by wind, in which case the wind loads shall be in accordance with the International Building Code. The seismic loads for this retrofit design shall be those required by the building code in effect at the time of original construction, but not less than the reduced seismic forces.

HCD Response: Section 405.2.3.3 requires the building to be retrofitted only if the evaluation shows that the building, in its predamaged condition, was substandard (see HCD response for Section 405.2.3.1). Nevertheless, compliance with the current building code is not required "by default."

The general requirement is compliance with the IBC load combinations, and the effects of wind and seismic loads warrant special consideration. This section allows wind and seismic loads to be calculated in compliance with the building codes effective at the time of original construction. However, if wind forces have caused the damage, this section requires the building to comply with the wind-load provisions from the current code. (See also HCD response for Sections 405.2.3 and 405.2.3.1)

405.2.4 Substantial structural damage to gravity load-carrying components. Gravity load-carrying components that have sustained substantial structural damage shall be rehabilitated to comply with the applicable provisions for dead and live loads in the International Building Code. Snow loads shall be considered if the substantial structural damage was caused by or related to snow load effects. Undamaged gravity load-carrying components that receive dead, live or snow loads from rehabilitated components shall also be rehabilitated if required to comply with the design loads of the rehabilitation design.

HCD Response: The intent of this section is to require retrofitting of gravity load-carrying elements (such as columns or bearing walls) that have sustained substantial structural damage as defined. The section does not specify whether the reason for the damage is an accident (car accident, for instance) or the gravity load-carrying elements were unable to resist the design dead, live, and snow loads. If the gravity load-carrying elements are substandard, then the building may be considered substandard.

405.2.4.1 Lateral force-resisting elements. Regardless of the level of damage to vertical elements of the lateral force-resisting system, if substantial structural damage to gravity load-carrying components was caused primarily by wind or seismic effects, then the building shall be evaluated in accordance with Section 405.2.3.1 and, if noncompliant, retrofitted in accordance with Section 405.2.3.3.

Exceptions:

1. Buildings assigned to Seismic Design Category A, B, or C whose substantial structural damage was not caused by earthquake need not be evaluated or retrofitted for load combinations that include earthquake effects.
2. One- and two-family dwellings need not be evaluated or retrofitted for load combinations that include earthquake effects.

HCD Response: See HCD response for Sections 405.2.3 and 405.2.3.1.

COMMENT 2D: HCD proposes to add “Substandard Building” to the definitions in the 2019 CEBC. Doing so will cause great confusion amongst design professionals and building officials because many of the items that cause a building to become a substandard building are ambiguous or vague. The Substandard Building definition, shown on page 12 of the Final Express Terms (dated November 5, 2018), reads:

SUBSTANDARD BUILDING. (HCD 1, HCD 2) Any building, structure or portion thereof, in which there exist any of the conditions listed in the Health and Safety Code, Section 17920.3, shall be deemed substandard. A building, structure, or portion thereof, declared as substandard, shall be considered unsafe, as defined in this chapter.

Note the use of “any” in the phrase “any of the conditions listed in the HSC Section 17920.3.” ... This “laundry list” of conditions does not provide any references to building code provisions, any definitions, or any guidance on extent or severity of the conditions. Based on the wording proposed by HCD, if ANY of these conditions exist, the building is deemed substandard, and (per the Page 12 HCD amendment to the “unsafe” definition) unsafe. This clearly does not make any sense.

HCD Response: The entirety of Section 17920.3 is referenced, but not stated in the “substandard” definition. HSC Section 17920.3 also includes a phrase referencing the degree of endangerment. It is HCD’s intent that the “extent” phrase be incorporated by reference.

Any building or portion thereof including any dwelling unit, guestroom or suite of rooms, or the premises on which the same is located, in which there exists any of the following listed conditions to an extent that endangers the life, limb, health, property, safety, or welfare of the public or the occupants thereof shall be deemed and hereby is declared to be a substandard building:

HCD has revised the proposed definition to refer to HSC Section 17920.3 directly

without paraphrasing (see first 15-day express terms Section 202 SUBSTANDARD BUILDING).

SUBSTANDARD BUILDING. (HCD 1, HCD 2) See Health and Safety Code Section 17920.3.

COMMENT 2E: It is also necessary to strike the page 12 HCD amendment to the definition of “unsafe.”

HCD Response: This comment is based on the recommendation of deletion of a definition for “substandard building.” However, since HCD is still proposing a definition for “substandard” in the 2019 CEBC, a reference for relationship between the two terms is still helpful to the code user. HCD has modified the HCD amendment to clarify that an unsafe building would be considered substandard (see second 15-day Express Terms Section 202 UNSAFE (HCD1 & HCD 2)).

COMMENTS RECEIVED DURING THE FIRST 15-DAY PUBLIC COMMENT PERIOD ARE LISTED BELOW.

3. **COMMENTER:** Kent Sasaki, P.E., S.E. #3972
Unit Manager and Principal and CBSC Commissioner
Wiss, Janney, Elstner Associates, Inc.
Engineers | Architects | Materials Scientists
2000 Powell Street, Suite 1650, Emeryville, CA 94608

COMMENT 3A: The commenter expresses his disappointment that HCD only proposed a few of the changes discussed at the December 4, 2018 CBSC meeting. The commenter believes that the grave concerns he expressed during the meeting were not addressed by HCD.

HCD Response: HCD acknowledges the commenter’s point of view. The following information is included as background of transitioning from provisions for existing buildings in the 2013 CBC (Chapter 34) to the 2016 CEBC.

HCD did not adopt all chapters from the 2015 IEBC during the 2015 Triennial Code Adoption Cycle due to time constraints for coordination with stakeholders and other state agencies. HCD’s intent was to take the existing regulations from CBC Chapter 34 and relocate them into the 2016 CEBC without additional mandates or any changes in regulatory effect from the 2013 CBC. However, HCD pledged to re-evaluate the 2018 IEBC pursuant to a statutory requirement to substantially adopt the most recent model code (IEBC), and adopt additional chapters or sections, if needed. HCD did subsequently evaluate all sections which were new in the 2018 IEBC or were not adopted into the 2016 CEBC. As a result, HCD proposed for adoption all sections, including Section 405 related to structural repair, which HCD’s technical staff believe did not conflict with the HSC and which provided important information for design and enforcement. In addition, HCD proposed for adoption model code Section 101.2 (Scope), including the exception, which allows detached one-and two-family dwellings and townhouses to comply with the CEBC or the California Residential Code. HCD also

proposed for adoption all exceptions for detached one-and two-family dwellings and townhomes.

These new proposals were included in the rulemaking documents and were made available for comments and discussions during HCD's Focus Group Meeting (April 14, 2018), Code Advisory Committee meeting (July 31, 2018), and 45-day public comment period (September 14, 2018 to October 29, 2018). HCD did not receive any comments in opposition or with concerns and following the requirements in the Building Standards Law and the California Administrative Code, and the CBSC's procedures, included the 45-day proposals in the Final Express Terms for approval by the CBSC. Many stakeholders that supported these proposals did not attend the CBSC meeting on December 4, 2018, because they supported or did not have concerns; or probably did not expect there would be issues or any discussion related to these proposals.

The BSL, HSC, Section 18927, provides that the CBSC may appoint from multiple disciplines advisory panels to advise both the commission and its staff with respect to building standards. Six CAC members are identified in the California Administrative Code, Section 1-209; the required CAC review procedures of proposed rulemakings are located in Section 1-409. CBSC's authority, overview and operational responsibilities are derived from the BSL, which includes incorporating the intent of the Administrative Procedure Act (APA) as provided by HSC Section 18929.1(a)(5). HCD's proposed adoption of Section 405 was approved by the CAC for the 2019 CEBC.

Unfortunately, these substantive comments were received very late in the 2018 triennial code adoption cycle. As noted, HCD's proposed express terms were available as early as March 23, 2019, (Notice for the Focus Group Meeting) to October 29, 2018 (end of the 45-day public comment period). HCD did not receive any public comments or concerns during this time. At this late juncture HCD has authority to make some related nonsubstantial changes during one or two 15-day public comment periods as allowed by CBSC, however, it is unable to make substantive changes without reengaging stakeholders and convening a second 45-day public comment period.

COMMENT 3B: The first 15-day Express Terms leave out the "in-kind" repair provisions from Chapter 4 Repairs, and do not remove the adoption of the structural upgrade triggers in the IEBC. Consequently, code users will be directed to Section 405.2 Repairs, to damaged buildings which includes all the structural upgrades triggers for nonresidential structures. This will result in requiring structural upgrades for damaged residential buildings which is in direct conflict with state law. Requiring structural upgrading of damaged residential structures will have a huge financial impact on California, particularly after natural disasters like earthquakes or wildfires where thousands of residential structures may be damaged. Insufficient funds available for structural upgrading could lead to widespread abandonment of structures.

HCD Response: See responses to Comment 2C as related to the individual inclusions of use of “in kind” repairs. In addition, HCD has proposed a new amendment in Chapter 4, Section 402.3 (see second 15-day Express Terms) with a reference to Section 302.5 addressing new and replacement materials.

4. COMMENTER: Kelly E. Cobeen, S.E.
922 Hough Avenue
Lafayette, CA 94549

COMMENT 4A: The commenter notes that adoption of the 2019 CEBC as proposed by HCD will create a fundamental and overwhelming change in how repair of damaged dwellings is treated in California by requiring buildings to be improved before reoccupation. Damaged buildings will be subject to engineering evaluation of damage and potential triggering of upgrades to the entire gravity and/or lateral force-resisting systems. These changes are resulting from HCD not carrying forward text from the 2016 and prior editions of the CEBC and CBC which would have permitted in-kind repair of damaged buildings. This will result in chaos in determining what upgrades are triggered and increases in costs and efforts to get residents back into damaged dwellings.

The conflict between text not being carried forward and matching text in the HSC puts the professional, home builder, and building official in the untenable position of trying to decide which state law to ignore or break. The commenter requests the CBSC to not approve the adoption as proposed by HCD.

The commenter notes that the choice to invest resources in the improvement of damaged buildings is one that can and should be debated by the broader affected community and appropriate to a forum, timeframe and participants relevant to the impact on California housing. The cost-to-benefit impacts of these changes do not appear to have been appropriately considered. Since this work has not been completed, the commenter requests the CBSC to not approve HCD’s proposal.

HCD Response: Although not directly related to the first 15-day proposal, HCD acknowledges the commenter’s point of view. See responses to Comments 2 and 3.

COMMENT 4B: The commenter recommends one of two actions for the CBSC:

1. Reject the adoption of the 2019 CEBC in its entirety, retaining the 2016 CEBC with 2016 HCD amendments,

HCD Response: This recommendation is contrary to HCD statutory requirement to adopt the most current version of the model code.

HSC 17922

(b) In adopting building standards for approval pursuant to Chapter 4 (commencing with Section 18935) of Part 2.5 for publication in the California Building Standards Code and in adopting other regulations, the department shall consider local conditions and any amendments to the international or uniform

codes referred to in this section. Except as provided in Part 2.5 (commencing with Section 18901), in the absence of adoption by regulation, the most recent editions of the international or uniform codes referred to in this section shall be considered to be adopted one year after the date of publication of the applicable international or uniform codes.

or

2. Modify the proposed adoption of the 2019 CEBC as follows:
 - Do not adopt Sections 302.5.1, 405.2.1, 405.2.1.1, 405.2.2, 405.2.3, 405.2.3.1, 405.2.3.2, 405.2.3.3, 405.2.4, and 405.2.4.1. These sections conflict with Section 17958.8 of the HSC and violate the requirement that in-kind repairs and in-kind construction be permitted.

HCD Response: The proposed modifications are substantial, not sufficiently related to the text submitted to the CBSC for approval, the public was not adequately placed on notice that the change could result from the originally proposed building standards, and the public did not have the opportunity to comment and discuss as required by the BSL and the APA. See also HCD response to Comments 2 and 3.

- Add Section 401.2.1 to the 2019 CEBC as follows:

[HCD 1] 401.2.1 In-Kind Repairs. Local ordinances or regulations shall permit the replacement, retention and extension of original materials, and the use of original methods of construction, for any building or accessory structure, provided such building or structure complied with the building code provisions in effect at the time of original construction and the building or accessory structure does not become or continue to be a substandard building. For additional information, see Health and Safety Code Sections 17912, 17920.3, 17922(d), 17922.3, 17958.8 and 17958.9.

- Add Section 503.1.1 to the 2019 CEBC as follows:

[HCD 1] 503.1.1 Materials. Local ordinances or regulations shall permit the replacement, retention and extension of original materials, and the use of original methods of construction, for any building or accessory structure, provided such building or structure complied with the building code provisions in effect at the time of original construction and the building or accessory structure does not become or continue to be a substandard building. For additional information, see Health and Safety Code Sections 17912, 17920.3, 17922(d), 17922.3, 17958.8 and 17958.9.

HCD Response: See response to Comment 2B.

5. COMMENTER: Gwenyth R. Searer, P.E., S.E., Principal
3192 Stanley Boulevard
Lafayette, CA 94549

COMMENT 5A: The commenter believes HCD's proposed changes continue to violate both the letter and the legislative intent of the state law. The commenter is pointing out that she communicated her concerns at the December 4, 2018, CBSC meeting and provided a six-point list of items HCD needed to address. The commenter also states that information was also provided to HCD through emails and offers to talk over the telephone. The commenter notes that she works for a nationally known consulting firm and serves on several national committees; however, her comments represent her personal opinion only.

HCD Response: Although not directly related to the first 15-day proposal, HCD acknowledges the commenter's point of view. See following specific comments and HCD responses.

COMMENT 5B: HSC Section 17958.8 specifically permits replacement and retention of original materials and the use of the original methods of construction for repairs in accordance with the building code at the time of construction. HCD proposes to adopt all of the upgrade triggers in Section 405.2, including the snow damage upgrade trigger (Section 405.2.1.1), the disproportionate earthquake damage trigger (Section 405.2.2) and two substantial structural damage triggers (Section 405.2.3 and 405.2.4). All these triggers violate the letter of HSC Section 17958.8 and were explicitly not adopted by HCD in the 2016 CEBC and prior codes. HSC Section 17958.8 has not changed. HCD has to either make the proposal match the prior code (accommodating for model code changes) or the proposed changes will be in conflict with HSC Section 17958.8 and thus be illegal.

HCD Response: See responses to Comments 2 and 3.

COMMENT 5C: The commenter believes that Section 302.5.1, which requires new structural members and connections to comply with the detailing provisions for new buildings, violates the HSC.

HCD Response: Section 302.5.1 requires new structural members and connections to comply with the detailing provisions of the IBC (as adopted for the CBC), and provides an exception if alternative design criteria are specifically permitted. It is unclear how this requirement conflicts with the HSC since it is applicable to new structural members and connections only. Section 302.4 allows materials already in use in a building which were in compliance with approvals at the time of construction and allowed to remain in use unless determined to be unsafe. Section 302.5, including the first 15-day Express Terms amendment, already addresses existing materials. In addition, the exception allows alternative design (as per ASCE 41, for instance), which may not be as disruptive as the CBC requirements.

COMMENT 5D: Legislative intent for HSC Section 17958.8 is found in the Legislative Counsel's Digest for Assembly Bill 1034 in 2003. The intent states the purpose of the statutory amendment was meant to permit materials and methods of construction that "comply with the building code provisions governing that portion of the building or accessory structure at the time of its construction and other requirements governing the building or accessory structure at that time..." The spirit/intent of the law will be violated if the upgrade triggers in Sections 405.2.1.1, 405.2.2, 405.2.3 and 305.2.4 are adopted by HCD. These upgrade triggers were not adopted in previous cycles and HCD would be violating the intent, as well as the letter, of the law and dramatically changing how HCD deals with existing residential structures, having a dramatic financial impact on California.

HCD Response: See responses to Comments 2 and 3.

COMMENT 5E: HCD's ISOR states that the upgrade triggers do not conflict with the SHL. HCD states: "Although the SHL allows the extension of original materials and use of methods of construction, structural damage makes the building a substandard building." The second half of this reasons is false because structural damage only makes a building "Substandard" if the damage is sufficient to endanger the public or the occupants. More importantly, the repair of that damage does not cause the building to become or continue to be substandard. Therefore, in-kind structural repairs must be permitted according to state law.

HCD's premise that "structural damage" is somehow different than any of the other conditions that may render a building "substandard" is false. HCD must recant the incorrect reasons previously given for adopting triggers that cannot be adopted without violating state law.

HCD Response: See responses to Comments 2 and 3.

COMMENT 5F: At the December 4, 2018 hearing, HCD staff testified that they did not intend to make any significant changes in how repairs should be implemented and implied that the changes were made simply to correlate and incorporate HCD's changes from the prior code into the newer code and merely an administrative task. This does not appear to be true. If HCD did not intend to modify how the 2019 CEBC will be implemented for residential structures, they should not have adopted all the upgrade triggers that violate HSC Section 17958.8. No basis has been provided for adopting them this cycle other than the incorrect justification that structural damage makes a building substandard, and in-kind repairs cannot address the substandard condition.

HCD Response: See responses to Comments 2 and 3.

COMMENT 5G: The commenter provides a list of changes or actions to be in conformance with HSC Section 17958.8 and also attached proposed changes to HCD's proposed first 15-Day Express Terms.

1. Do not adopt Sections 302.5.1, 405.2.1, 405.2.1.1, 405.2.2, 405.2.3, 405.2.3.1, 405.2.3.2, 405.2.3.3, 405.2.4 and 405.2.4.1. These sections are in direct conflict

with HSC Section 17958.8 and cannot be adopted without violating the requirement that in-kind repairs and in-kind construction be permitted.

2. Add new Section 401.2.1. which matches the text in the 2016 CEBC and correctly diverts users of the code away from the repair upgrade triggers.
3. Add new Section 503.1.1 Materials with same text as proposed Section 401.2.1. This would match the text in the 2016 CEBC and correctly allows users the option of “extension” of original materials as part of an alteration.
4. Do not adopt proposed amendment to definition of “unsafe.” There is no need to confuse the issue by adopting a definition that is different than that for all other buildings.
5. HCD needs to recant their position that structural damage cannot be repaired in-kind without triggering upgrades of the structure. The ISOR was factually incorrect on several key points and HCD needs to clearly state that their prior position was incorrect.
6. If HCD is unwilling to correct their mistakes, CBSC should reject all of HCD’s proposed changes and retain the 2016 CEBC for residential structures.

HCD Response: See responses to Comments 2, 3, and 4.

6. COMMENTER: Ali M. Fattah, P.E.
 Senior Research Engineer
 City of San Diego
 Division of Building, Safety & Construction
 Development Services Department
 1222 First Avenue, MS # 401
 San Diego, CA 92101

COMMENT 6A: The commenter offers his support for HCD’s proposed amendments to the repair provisions of the 2018 IEBC as modified in the recently posted first 15-day public comment period package. The commenter notices that the 2018 IEBC includes provisions for repairs in kind that are based on a determination that substantial structural damage does not exist. Additionally, the commenter recognizes that a new threshold for disproportionate earthquake damage has been added to the model code, and both of these provisions ultimately require an evaluation of the damaged building and the repairs or upgrades are not necessarily for full compliance like new buildings, for example, through reduced loads.

The commenter also expresses an opinion that:

- The IEBC does not differentiate between residential and non-residential occupancies and as a consequence is clearer when applied to mixed occupancy buildings that include residential occupancies.
- Provisions of HSC Section 17922 (f) can only be repealed through legislation and as a result they still apply. However, it appears that the IEBC does not conflict with the HSC and includes more current and specific regulations.
- It has always been the spirit of the State codes that non-compliant buildings be eventually brought up to compliance and thus deemed safe under the current

state of the practice. The IEBC repair provisions are new to California and broaden provisions that allow “replacement in kind” for portions of buildings during repairs to damage to non-residential occupancies, which is a significant progress.

- Community resilience is better served through regular upgrades to buildings and maintenance of the building stock. The IEBC provisions that have been fully vetted through an accredited national code development process and offer a balanced approach to achieving this goal.
- Federal Emergency Management Agency (FEMA) reimbursement for code upgrades requires that mitigation measures be in place prior to the disaster and the IEBC provides such standards for repairs.

HCD Response: HCD appreciates the commenter's support and the additional information provided by the commenter. HCD believes that the information related to FEMA reimbursement is very important for Californians and provides additional references below. See also HCD response to Comments 2, 3 and 4.

In accordance with FEMA Job Aid for Public Assistance, dated April 2017:

FEMA's Public Assistance Required Minimum Standards Policy found in the Public Assistance Program and Policy Guide, Chapter 2 – Section VII.B.2, requires that projects receiving FEMA assistance for repair or replacement incorporate the natural hazards-related provisions of the most recent edition of the International Code Council's *International Building Code*, *International Residential Code*, and/or the *International Existing Building Code*. The relevant code sections include design criteria for repair or replacement construction, but also provisions determining whether repair to the pre-damage condition is sufficient, or whether repair must be supplemented by improvement.

7. COMMENTER: Eugene Barbeau, P.E.
Building Code Engineer
Government and Community Relations/Code Studies
Department of Building and Safety
City of Los Angeles

COMMENT 7A: Commenter offers his support for HCD's proposed amendments to the repair provisions of the 2019 IEBC as modified in the recently posted first 15-day public comment period package.

The commenter also expresses an opinion that:

- The 2018 IEBC carries forth provisions for repairs to existing buildings sustaining less than substantial structural damage, as defined in the IEBC, in which damaged elements can be restored to their pre-damaged condition without triggering substantial evaluations and/or structural upgrades. This applies to residential and non-residential buildings as the IEBC does not differentiate between the two. Only those buildings evaluated to have sustained substantial

structural damage or disproportionate earthquake damage (causing the building to become potentially substandard/unsafe) would be required to comply with the structural provisions of Section 405 of the IEBC. Even then, the required evaluation and/or retrofit would be for compliance with current load combinations with reduced seismic loads.

- Relocating the text for 'in-kind' replacement of existing and original material to Chapter 3, Provisions for All Compliance Methods is appropriate based on the rationale for change provided by HCD. The relocated text still allows the use of like, 'in-kind' materials for repairs and alterations for all compliance methods.
- Commenter agrees with HCD's position that Section 405 of the 2018 IEBC does not conflict with the HSC but rather expands on the provisions for repairs to existing buildings while still allowing replacement in-kind for portions of existing buildings that sustain damage.

HCD Response: HCD appreciates the commenter's support and commenter's opinion. See also HCD response to Comments 2, 3, and 4.

8. COMMENTER: David Bonowitz, S.E.
605A Baker Street
San Francisco, CA 94117

COMMENT 8A: Section 202. Commenter agrees with the first 15-day amendment and the better way to provide the definition of "substandard building" is to refer to the HSC.

The commenter expresses concern with the last two sentences in HCD's rationale related to the synonymous use of the terms "unsafe" and "substandard." An example was provided whereas an existing "soft-story" or unreinforced masonry apartment building could be deemed substandard pursuant to HSC Section 17930.3(o), but would not be deemed dangerous. These buildings would, therefore, be allowed to be occupied and in service without triggering seismic retrofit. If every substandard building were to be deemed unsafe, some seismic mitigation may be triggered as soon as the seismic deficiency (substandard condition) is identified. It is not clear if we want every seismically deficient building to be immediately vacated or subject to the code's most onerous provisions for unsafe buildings.

HCD Response: HCD acknowledges the commenter's support and opinion.

HCD's existing amendment related to existing materials uses the term substandard, and the modified definition of "substandard" refers to the HSC. The model code uses the term "unsafe", which is also defined in Chapter 2. Since both terms ("unsafe" and "substandard") are used in the proposed CEBC, HCD's intent was to reference one term to the other in order to avoid misdirection or misinterpretation, and potential issues with design and enforcement. HCD has other amendments related to similar terms, e.g., approved agency, code official. The adoption of a definition for "substandard building" and a common reference between the definitions of "substandard building" and "unsafe" was requested years ago by building officials. HCD never intended to go further than that and regulate when a building can be occupied.

HSC Section 17920.3 provides a list of substandard conditions, but also includes a phrase referencing the degree of endangerment. This phrase clarifies that the substandard conditions will make a building substandard only if it endangers the life, limb, health, property, safety, or welfare of the public or the occupants.

HCD has modified the HCD amendment to clarify that an unsafe building would be considered substandard (see second 15-day Express Terms Section 202 UNSAFE (HCD1 & HCD 2)).

COMMENT 8B: Section 301. Commenter agrees with the first 15-day amendment to the Note. However, the commenter suggests that the note could be written for further clarity by citing the referenced section numbers and compliance methods in sequential order and possibly adding “respectively.”

HCD Response: HCD appreciates the commenter’s support and the commenter’s suggestion.

COMMENT 8C: Section 302. Commenter agrees with the first 15-day relocation of the “HCD1” provision and it is an appropriate place for the amendment. Commenter also notes that it would be better to have additional wording to clarify that the amendment is not intended to waive triggered upgrades to buildings that are so deficient as to be substandard.

HCD Response: HCD appreciates the commenter’s support and the commenter’s opinion. HCD has proposed adoption of Section 405 addressing repairs to damaged buildings. This section includes provisions for structural repairs in cases where there is no substantial structural damage (as defined including thresholds) or substantial structural damage to vertical elements of the lateral force-resisting system or gravity load-carrying components. HCD has not proposed amendment to the 2018 IEBC Section 405.

COMMENT 8D: Section 405. Commenter notes that the first 15-Day Express Terms do not show revisions to Section 405; however, the commenter understands that HCD is not adopting large parts of Section 405.2. The commenter’s recommendation is that HCD should adopt and enforce those sections of the model code for the following reasons:

1. Sections 405.2.1, 405.2.1.1, 405.2.2, 405.2.3 (and its subsections), and 405.2.4.1 trigger certain upgrades of damaged buildings, *but only in cases where an evaluation shows them to be substandard buildings.* Thus, these provisions are entirely consistent with the standard HCD policy.
2. If HCD does not adopt these provisions, California will be substantially out of compliance with the model code and therefore out of compliance with FEMA (and, I expect, Cal OES) policy. This means that California housing could be ineligible for post-disaster assistance.
3. Structural upgrade of deficient buildings when they sustain significant damage has been model code policy since 2009. Maintaining these sections of the model

code would follow the same sound logic as retaining Section 405.2.5, which triggers flood upgrade in flood hazard areas in order to comply with National Flood Insurance Program policy. Ideally, seismically deficient housing can be made safe by voluntary or mandatory programs before the next damaging earthquake, making a building code trigger unnecessary. Some California jurisdictions are working toward that. Until then, however, these provisions in Section 405 ensure that after damaging storms and earthquakes we do not simply build back the same deficiency that allowed the damage in the first place.

HCD Response: HCD acknowledges the commenter's opinion and the additional information related to FEMA. HCD's original 45-Day Express Terms identify HCD's intent to adopt the 2018 IEBC Section 405 (structural Sections 405.1 through 405.2.5) without change to model code text. This is still HCD's intent, therefore, there are no proposed changes related to Section 405 in the first 15-Day Express Terms. (See also response to Comments 2, 3, and 7.)

COMMENT 8E: Section 1401. Commenter agrees with the first 15-day amendment. The commenter's understanding is that due to the reference to "substandard buildings" the amendment means that seismic (or wind) upgrade might be triggered for a relocated building that is already deficient.

HCD Response: HCD appreciates the commenter's support. HCD's intent with the first 15-day proposal is to avoid confusion among stakeholders and code users familiar with the existing language related to the existing materials and methods of construction. However, the model code provisions related to repair, alteration, or change of occupancy undertaken within the moved structure should be applicable.

COMMENTS RECEIVED DURING THE SECOND 15-DAY COMMENT PERIOD ARE LISTED BELOW.

9. **COMMENTER** Gwenyth R. Searer, P.E., S.E., Principal
3192 Stanley Boulevard
Lafayette, CA 94549

COMMENT 9A: The commenter provides a history of communications with the CBSC addressing concerns that HCD's amendments violate state law and submission of a six-point list of items for HCD to address. Commenter states that HCD did not implement most of the changes recommended.

HCD Response: Although not directly related to the second 15-day proposal, HCD acknowledges the commenter's point of view. See HCD response to Comment 5.

COMMENT 9B: Commenter states that comments were submitted on December 19, 2018, during HCD's first 15-day comment period and HCD failed to make substantive changes addressing the commenter's concerns and failed to respond to public comments in a timely manner.

HCD Response: Although not directly related to the second 15-day proposal, HCD acknowledges the commenter's point of view. See HCD response to Comment 5.

COMMENT 9C: Commenter states that HCD belatedly provided a handout at the back of the room at the January 15, 2019, CBSC meeting that addressed submitted public comments. HCD also proposed a change to their regulations and failed to provide the public and Commission time to review it.

HCD Response: The CBSC directed HCD not to submit a modified Final Statement of Reasons and complete Final Express terms for the January 15, 2019, meeting. Nevertheless, HCD submitted a draft version of the Final Statement of Reasons for the meeting, which provided a comprehensive response to all public comments received after the final submittal. This document also included text from the model code for ease of reference by the commissioners. HCD also referenced possible further amendments to the first 15-day Express Terms but withdrew the changes to formally resubmit the proposal for a second 15-day comment period.

COMMENT 9D: Commenter notes attendance at HCD's "ad hoc" meeting on February 8, 2019, to discuss proposed changes. Commenter states that the meeting did not result in HCD altering their stance in any meaningful way.

HCD Response: HCD acknowledges the commenter's participation in the meeting and point of view.

COMMENT 9E: Commenter notes that Proposal 1 is a bad idea for which there is no need and a change that does not address their concerns. Both terms, "substandard" and "unsafe," contain ill-defined terms, therefore, each term is subjective and highly dependent on the judgment of the building official. HCD's proposal violates state law by redefining the statutory "substandard" by adding to it all buildings that are "unsafe." Commenter states that an HCD staff member also informed a public member that they planned to correct their initial proposal with a substantive change, but would claim that it was non-substantive to ensure the proposed was accepted – this tactic is offensive.

HCD Response: Although HCD disagrees with some of the commenter's statements, HCD acknowledges the commenter's point of view. The intent behind Proposal 1 is discussed in detail in the rationale, which is part of the second 15-day Express Terms.

COMMENT 9F: Commenter notes that Proposal 2 is identical to the proposal submitted to the CBSC on January 15, 2019. HCD's claim that the change was made available for comments during the first 15-day public comment period ending January 3, 2019, is false. The commenter also disagrees with HCD's statement that "the proposed amendments have no intended change in regulatory effect" since HCD made statements that the proposed change was substantive and therefore had to be withdrawn.

Commenter notes that Proposal 2 is actually good, however fails to address the root of their concerns – the upgrade triggers in the IEBC are still being proposed for adoption and these triggers blatantly violate both the letter and spirit of the HSC.

The commenter provides history on HCD code adoptions and HCD's response that there was lack of time to figure out what to do with the upgrade triggers in the model code. The commenter states that HCD Statements of Reasons are clear that the issue was never about lack of time, but that the upgrade triggers violate state law, therefore could not be adopted.

HCD Response: Although HCD disagrees with some of the commenter's statements, HCD acknowledges the commenter's point of view. The intent behind Proposal 2 is discussed in detail in the rationale, which is part of the second 15-day Express Terms. See responses to Comments 2 and 3 regarding history on HCD code adoptions.

COMMENT 9G: Commenter notes that HCD is still proposing to adopt all of the upgrade triggers in Section 405.2. All of these triggers violate the letter of the law in HSC Section 17958.8 which permits replacement of original materials and the use of the original methods of construction for repairs pursuant to the building code at the time of construction.

These sections were not adopted in the 2016 CEBC specially to avoid conflict with state law, therefore, HCD must make their proposal match the prior code or the proposed changes will be in conflict with Section 17958.8 and will, thus, be illegal.

Section 302.5.1 requires that new structural members and connections comply with the detailing provisions for new buildings. This is also a violation of the HSC in cases where repairs require new structural members or connections.

The commenter provides information on the legislative intent for amendment of HSC Section 17958.8 and quotes from the Legislative Counsel's Digest for AB 1034 from 2003. The commenter states that the intent could not be clearer and the spirit/intent of the law will be violated in the upgrade triggers in Sections 405.2.1.1, 405.2.2, 405.2.3 and 305.2.4 are adopted. This is the reason upgrade triggers were not adopted for the last four code cycles (2016 CEBC, 2013 CEBC, 2010 CBC and the 2006 CBC).

HCD Response: Although not directly related to the second 15-day proposal, HCD acknowledges the commenter's point of view. See responses to Comments 2 and 3.

COMMENT 9H: The commenter notes that HCD claims that they are not legally required to consider fiscal impacts unless someone questions their initial estimate, the initial estimate is clearly incorrect and HCD hiding behind a statute to avoid considering the economic impact of their proposed changes is a dereliction of duty.

HCD Response: Although not directly related to the second 15-day proposal, HCD acknowledges the commenter's point of view. Government Code Section 11346.2(b)(5)(B)(ii) of the APA exempts identification of an estimated cost of compliance from the initial statement of reasons when a model code, e.g., IEBC, is being adopted. The section also provides for an interested party to submit a request, at least 30 days before the submittal for the initial statement of reasons, to examine a specific section for purposes of estimating the cost of compliance and the potential

benefits of that section, assumption used to determine estimates. HCD did not receive any requests for this information during the specified period.

COMMENT 9I: The commenter notes that HCD's rationale for determining that upgrade triggers proposed for adoption were not in conflict with state law. Specifically, the commenter notes that the phrase "...structural damage makes the building a substandard building" is false. HCD must recant the incorrect reasons for adopting triggers that cannot be adopted without violating state law.

HCD Response: Although not directly related to the second 15-day proposal, HCD acknowledges the commenter's view. See responses to Comments 2 and 3.

COMMENT 9J: The commenter proposes two sets of solutions:

- Do not adopt Sections 302.5, 405.2.1, 405.2.1.1, 405.2.2, 405.2.3, 405.2.3.1, 405.2.3.2, 405.2.3.3, 405.2.4 and 405.2.4.1 because they are in conflict with HSC Section 17958.8 and violate the requirements that in-kind repairs and in-kind construction be permitted.
- Add Section 503.1.1 Materials which matches text in the 2016 CEBC and correctly allows users the option of "extension" of original materials as part of an alteration.

HCD Response: Although not directly related to the second 15-day proposal, HCD acknowledges the commenter's view. See responses to Comments 2, 3, and 4.

COMMENT 9K: The commenter states that HCD needs to recant their position that structural damage cannot be repaired in-kind without triggering upgrades of the structure. HCD's ISOR was factually incorrect on several key points and HCD needs to clearly state that their prior position was incorrect.

HCD Response: Although not directly related to the second 15-day proposal, HCD acknowledges the commenter's point of view. The commenter's statements were discussed several times, including during the Ad Hoc Committee meeting in February 2019. HCD provided very detailed explanation, verbally and in writing, justifying HCD's intent to allow in-kind repair if the building is not a substandard building.

COMMENT 9L: The commenter states that the CBSC should reject HCD's proposed changes and retain the 2016 CEBC for residential structures.

An alternate is proposed for CBSC to adopt most of HCD's proposed changes, but not the problematic relationship between "unsafe" and "substandard" and not adopt the upgrade triggers in the code.

HCD Response: HCD acknowledges the commenter's view. See response to Comment 4B.

10. COMMENTER Kelly E. Cobeen, S.E.
922 Hough Avenue
Lafayette, CA 94549

COMMENT 10A: The commenter states that the rationale for Item 2 is incorrect in that the Chapter 4 amendments do not solve the issues raised by stakeholders. It is vital that the triggers for evaluation and upgrade based on substantial structural damage (CEBC 405.2.1 to 405.2.4) continue to be omitted from the HCD adoption as in past adoptions of the CBEC.

HCD Response: The rationale for Item 2 (Section 402.3) states that Sections 301.3 (exception), 302.4 and 302.5 (second sentence), with HCD's amendment in Section 302.5 already addresses the use of existing materials and original methods of construction for alterations and repairs. Item 2 was added to provide further clarification within Chapter 4 addressing repairs.

COMMENT 10B: The commenter notes participation in HCD's Ad Hoc Working Group and HCD's comment that the proposed retention of the substantial damage triggers originated from requests from building officials to clarify the HSC provisions regarding substandard buildings. The commenter further states that the unintended consequence of adopting the triggers will cause fundamental and overwhelming changes in treatment of repair of damaged dwellings. A tremendous amount of resources (both time and money) will have to be put into improving damaged dwellings, that are not substandard prior to allowing occupancy. The impact will be especially problematic for wood light-frame residential buildings that were not engineered and use finish materials as the lateral force-resisting system. The commenter notes that in many cases upgrades, e.g., installing a new engineered seismic/wind force resisting system, may be needed costing many times for the cost of damage repair. Many owners may not be insured for the HCD code-created catastrophe, making it possible they will not be able to rebuild.

HCD Response: Although not directly related to the second 15-day proposal, HCD acknowledges the commenter's point of view. See responses to Comments 2 and 3.

COMMENT 10C: The commenter states that pursuing clarity of the substandard building language needs to be a separate and distinct effort, undertaken in a future code adoption cycle. Development of rational triggers for and extents of update is reasonable to undertake in a future code adoption cycle. In the meantime, substantial structural damage triggers need to be omitted from HCD adoption of the CEBC as in past code adoption cycles.

The commenter requests that the CBSC not adopt Section 302.5.1, 405.2.1, 405.2.1.1, 405.2.2, 405.2.3, 405.2.3.1, 405.2.3.2, 405.2.3.3 405.2.4 and 405.2.4.1. If the omission action is not possible, the commenter requests CBSC to retain the 2016 CEBC with 2016 HCD amendments. Adoption of the 2019 CEBC without HCD amendments should be occur since it will not resolve the issues raised in the comment letter and will cause other issues.

HCD Response: Although not directly related to the second 15-day proposal, HCD acknowledges the commenter's point of view. See responses to Comment 4B.

11. COMMENTERS Aman Shah, P.E., President
Ali M. Fattah, P.E., Vice President
San Diego Area Chapter of ICC
10601 G Tierrasanta Boulevard, Box #126
San Diego, CA 92124

COMMENT 11A: The commenters, on behalf of the San Diego Chapter of the ICC representing 20 jurisdictions in San Diego County, expresses support for HCD proposed amendments for the 2019 CEBC. The commenters further clarify support for HCD's decision to adopt the repair provisions in IEBC Chapter 4 without deletions.

The commenters note that they have participated directly with HCD through stakeholder meetings and CAC meetings and believe that the model codes should be adopted with a minimum number of state amendments unless in conflict with statutory or other amendments. Minimizing state amendments will improve consistency of application and uniformity of enforcement statewide.

The commenters have reviewed HCD's matrix comparing IEBC provisions with the HSC and concur that repair requirements in IEBC Section 405 do not conflict with HSC 17922. The commenters note that the IEBC provides more enforceable thresholds than the broader determination that a damaged building is "substandard." The commenters also state that it would not be efficient or reasonable to have more detailed requirement for the non-residential portions of mixed occupancy buildings.

The commenters opine that stakeholders in opposition to HCD's proposed adoption of the IEBC's repair provisions should pursue changes through ICC and not the CBSC. The commenters further state agreement that the proposed IEBC adoption package satisfies the HSC Section 17922 requirement to adopt the model code.

The commenters also express support for HCD's proposed editorial changes (Section 402.3 in the second 15-day Express Terms) referencing Section 302.5.

HCD Response: HCD appreciates the commenters' support. HCD proposed Section 402.3, in the chapter addressing repairs, to provide a specific reference to an existing California amendment addressing the use of existing materials and methods of construction for clarification purposes.

DETERMINATION OF ALTERNATIVES CONSIDERED AND EFFECT ON PRIVATE PERSONS

Government Code Section 11346.9(a)(4) requires a determination with supporting information that no alternative considered would be more effective in carrying out the purpose for which the regulation is proposed, or would be as effective and less burdensome to affected private persons than the adopted regulation, or would be more cost-effective to affected private persons and equally effective in implementing the statutory policy or other provisions of law.

HSC Section 18928.1 requires building standards adopted or approved by the CBSC to incorporate the text of the model codes, applicable national specifications, or published standards, in whole or in part, only by reference, with appropriate additions or deletions. In addition, HSC Section 18928 directs each state agency adopting or proposing adoption of a model code, national standard, or specification to reference the most recent edition of applicable model codes, national standards, or specifications. The 2019 CEBC implements this requirement by proposing to adopt by reference the selected contents of the 2018 IEBC (i.e., model code). No other alternatives have been considered since there is a recent model code available for adoption, including any necessary existing and new California amendments. In addition, adoption of the most recent building standards on a statewide basis, as required by statute, results in uniformity and promotes affordable costs.

REJECTED PROPOSED ALTERNATIVE THAT WOULD LESSEN THE ADVERSE ECONOMIC IMPACT ON SMALL BUSINESSES:

Government Code Section 11346.9(a)(5) requires an explanation setting forth the reasons for rejecting any proposed alternatives that would lessen the adverse economic impact on small businesses, including the benefits of the proposed regulation per Section 11346.5(a)(3).

There were no alternatives available to HCD. HCD is required by statute to adopt this model code by reference. Providing the most recent methods and applying those building standards on a statewide basis, as required by statute, results in uniformity and promotes affordable costs.