

*As approved by The Governing Board on Tuesday, May 30, 2023.*

**CALIFORNIA EARTHQUAKE AUTHORITY  
CALIFORNIA RESIDENTIAL MITIGATION PROGRAM  
GOVERNING BOARD TELECONFERENCE MEETING  
MINUTES**

**Tuesday, February 14, 2023  
1:00 p.m.**

Members of the California Residential Mitigation Program (CRMP) Governing Board in attendance:

Laurie Johnson, Chair, CRMP Governing Board  
Lori Nezhura, Vice Chair Appointee, Deputy Director, California Office of Emergency Services (Cal OES)  
Jennifer Bollinger, Chief Counsel, Cal OES  
Tom Welsh, CEA Appointee, CRMP Governing Board

Members of the CRMP Staff in attendance:

Janiele Maffei, Chief Mitigation Officer, CRMP  
Jennifer Hogan, Managing Director, CRMP  
G. DeCoteau, Agent Outreach Coordinator, CEA  
Charlotte Fadipe, Chief Communications Officer, CEA  
Mark Grissom, Program Manager, CRMP  
Benjamin Kirwan, Treasurer, CRMP  
Seth Merewitz, Counsel, CRMP  
Suman Tatapudy, Secretary, CRMP  
Catharine Shaw, Communications Coordinator, CEA  
Maura White, Program Analyst, CRMP

Also Present:

David Bonowitz  
Henry Burton, UCLA

**[Note: Agenda Item 6 was taken out of order. These minutes reflect this Agenda Item as listed on the agenda and not as taken in chronological order.]**

**1. Call to order and member roll call.**

Chair Johnson called the meeting to order at 1:01 p.m. A quorum was achieved.

**2. Consideration and approval of the minutes of the December 12, 2022, CRMP Governing Board Meeting.**

**MOTION:** Chair Johnson moved approval of the December 12, 2022, California Residential Mitigation Program Governing Board Meeting Minutes as presented. Ms. Bollinger seconded. Motion carried unanimously with no abstentions.

**3. CRMP Treasurer Benjamin Kirwan will review the CRMP financial statements as of December 31, 2022.**

Benjamin Kirwan, CRMP Treasurer, provided a slide presentation overview of the CRMP financial information as of December 31, 2022. He stated the \$2 million from the CEA Loss Mitigation Fund to the CRMP was transferred at the beginning of the month. He noted that the Total Revenue came in slightly over the \$10.1 million budgeted amount. The EBB Marketing Program Education line item was slightly under budget due to the \$125,000 research study for 4407 that was deemed unnecessary. Also, the Legal Services line item was up slightly, due to necessary work that needed to be performed for the MFSS Retrofit Grant Program for the additional Board meeting in 2022. Total Administrative Expenses came in under budget. Grants to homeowners came in under budget, due to the slow start of FEMA 4407 for the ESS Program.

Mr. Kirwan stated 2023 projections are moving forward as planned.

Discussion

Chair Johnson asked about next steps for the unaudited financial statements.

Mr. Kirwan stated the audit will take place remotely again this year and is scheduled to begin at the end of March. The audited financial statements will be presented to the Board at the June meeting.

Chair Johnson stated, because of the current insurance market, the Insurance line item came in higher than expected.

Mr. Kirwan agreed and stated cyber insurance rates had also increased.

**4. CRMP Executive Director Janiele Maffei will present her executive report.**

Janiele Maffei, CRMP Chief Mitigation Officer, provided a slide presentation overview of the 2022-2023 Ferndale Earthquake Sequence in Humboldt County. She showed examples of homes with content, chimney, and appurtenance damage, mobile and manufactured and single-family wood-framed dwelling damage, and photos of two of the four Rio Dell houses owned by 2022 Earthquake Brace + Bolt (EBB) program registrants, both pre- and post-event. One of the two photos of the damaged EBB-registrant houses included a neighboring house that had had some retrofitting done. The neighboring house had sustained little or no damage, while the EBB-registrant home had come off its foundation, will require hundreds of thousands of dollars to repair, and will be uninhabitable for a significant amount of time.

Ms. Maffei noted that this event did not trigger a Presidential Disaster Declaration so only limited Federal Emergency Management Agency (FEMA) funding will be available to Humboldt County residents.

Ms. Maffei stated the CRMP Board supported a \$250,000 grant to retrofit 100 houses after the 2014 South Napa Earthquake. She noted that, although only 89 were completed, it was early in the program. The CRMP is now able to offer 200 grants with nontaxable FEMA

funding for Humboldt County residents with a separate selection process. She stated a high percentage of residents who register during the new registration period will qualify for the Supplementary Grant.

Ms. Maffei stated staff met with many policyholders after the Humboldt event who asked what the CEA can do for them. Although FEMA funding cannot be used for repair, after pier-and-post houses are repaired by installing new piers and posts, the CEA can provide funding for new continuous perimeter concrete foundation retrofits to mitigate the poor-performing pier-and-post foundation.

Ms. Maffei updated the Governing Board on other CRMP and CEA mitigation interests and projects:

- EBB Supplementary Grants are now not considered taxable income.
- A pilot program for Single-Family Earthquake Soft-Story (ESS), will open in May of 2023 in Los Angeles, Alameda, and San Francisco Counties.
- The CRMP applied for FEMA Building Resilient Infrastructure and Communities (BRIC) Grant funding for Multi-Family Soft-Story (MFSS) structures in 2021 and 2022. FEMA is still working on funding the 2020 BRIC grants.
- The \$250 million Senate Bill (SB) 189 funding for MFSS housing was not included in the budget.

### Discussion

Chair Johnson asked if the Legislature could add the \$250 million back in.

Ms. Maffei stated there are other avenues such as the U.S. Resilience Council, Earthquake Engineering Research Institute, and Structural Engineers Association of California. The CEA is not advocating for this funding.

Seth Merewitz, CRMP Counsel, stated there is an opportunity for change in the Governor's May Revise of the budget; however, the \$250 million funding was prospective.

Mr. Welsh stated appreciation for legislators who try to push the Administration to appropriate funds for specific projects like the MFSS. He suggested focusing on the fact that SB 189 contains language that can be misconstrued as potentially limiting the Board from using non-budget funds, such as funding from the Loss Mitigation Fund and FEMA, to pursue MFSS programs. Even if the state appropriation does not come through, the CRMP should continue to pursue programming, particularly by getting funding through FEMA.

Mr. Welsh stated the 2023 Turkey-Syria earthquake has had a significant impact on the governor and policy makers in California since California is vulnerable to earthquakes of those magnitudes. This may cause a focus pivot back to the kind of work that the CRMP is doing. He suggested being prepared for those changes, if they should arise.

Vice Chair Nezhura asked if pier-and-post foundations tend to be seen in coastal areas that are perhaps in inundation zones, and if the new continuous perimeter concrete foundation retrofits impact and enhance the efficacy of the homes to withstand tsunamis.

Ms. Maffei stated the pier-and-post foundations are short; they do not elevate the house above flood level. Timber was readily available in Humboldt County. Pier-and-post

foundations are more for ventilation in moist climates and are also seen in Hawaii. Humboldt County also has lots of company housing that was moved from place to place following the work.

Chair Johnson stated discussion on the Turkey-Syria earthquake has unfortunately included misleading commentaries that California does not have collapse hazard vulnerabilities. The MFSS program could correct a major collapse vulnerability seen in the 1994 Northridge Earthquake of soft-story apartment buildings falling off their foundations. It would be great for the Legislature or Governor to recognize the importance of this program in reducing California's collapse hazard vulnerabilities.

#### Public Comment

David Bonowitz, structural engineer, stated ERI and Spur have together written a letter to Assembly Member Rodriguez urging that the new \$250 million program be protected. He asked what the professional and advocacy communities can do to help ensure that program is preserved in the budget.

Mr. Welsh stated CEA staff has not had the opportunity to talk to the CEA Governing Board for guidance on public policies and legislative issues to push the Legislature to pursue. In general, the CRMP wants the Administration and the Legislature to know that the CRMP was formed specifically to pursue these types of programs and is structurally ready to implement new mitigation programs.

#### **5. CRMP Managing Director Jennifer Hogan will present the CRMP Mitigation (Earthquake Brace + Bolt) update.**

Jennifer Hogan, CRMP Managing Director, provided a slide presentation overview of the funding opportunities, retrofit funding by year completed, retrofits completed by program, average cost of EBB retrofit, statewide retrofit costs by year, and EBB Program contractors. She reported the following:

- 19,168 retrofits have been completed to date and 5,318 retrofits are in progress.
- 18,000 regular grants and 3,000 supplemental grants are available.
- Just under 16,000 registrants are in the queue.
- Roughly 2,000 additional registrants will be accepted every six weeks until all of them are accepted.
- An additional 9,800 EBB retrofits will be completed by early next year.
- The current average cost per retrofit is \$6,177.
- Staff is preparing to launch the ESS Program soon.
- The Contractor Campaign is expected to launch by the end of the month to train contractors to install ESS retrofits.
- The homeowner registration is expected to open by April of 2023.

Ms. Hogan stated staff is working on the annual Business Plan update. A draft of the updated Business Plan will be presented at the May meeting. No substantive changes are anticipated. Staff is also in the process of updating various policies that were last updated in

2020, including the privacy, social media, and terms of use policies, as well as the CRMP disclaimer. These need to be updated to include the ESS program information.

### Discussion

Chair Johnson asked for additional thoughts on the decreasing costs in Northern California.

Ms. Maffei stated there were a handful of contractors providing retrofits in the East Bay at inflated prices. Research in this area will be useful, particularly in meeting the needs of underserved communities.

Vice Chair Nezhura stated only 1/3 or less of the contractors on the list are actively doing retrofits. She asked if staff has looked at the geographic distribution of those contractors overlaid with the EBB ZIP Codes to see if any ZIP Codes have a dearth of contractors and if that impacts the programs in certain areas of the state.

Ms. Hogan stated outreach is focused on areas with low contractor availability. She noted that there are only three contractors in the Contractor Directory for eligible ZIP Codes in the areas surrounding the Ferndale earthquake. Marketing teams are working to add contractors to the Directory in those areas.

Ms. Maffei stated it is a matter of supply and demand – low numbers of contractors will artificially inflate the price. She stated members of the community have offered to help find solutions to this issue.

Mr. Welsh acknowledged the work of the Cal OES in creating a pipeline for retrofit grant funding.

### Public Comment

G. DeCoteau, CEA Agent Outreach Coordinator, asked if the 760 contractors in the directory with no EBB projects are active with ZIP Code service areas selected.

Ms. Hogan stated they are.

G. DeCoteau asked if homeowners included these contractors in emails requesting contact for an estimate to see if they were engaged by homeowners but did not follow up versus never being contacted through the homeowner dashboard.

Mark Grissom, CRMP Program Manager, stated staff has not yet looked at that.

Ms. Maffei stated she has gone through the contractor list looking at the web presence for contractors with low or no retrofit work. Those who have done many retrofits are obviously more experienced in this work, but they also tend to have websites with information about seismic retrofits. When homeowners are searching for a contractor, those websites will come up on the top of the list. PR and marketing staff are looking at ways to bring information and support to the contractors with low numbers to help them be successful by encouraging them to create a logo and website and have a person to answer the phones.

David Bonowitz referred to the slide showing the change in retrofit costs and asked if those dollars are 2018 or 2022 dollars and if they have been adjusted for inflation. He noted the interesting fact that there did not seem to be a change in the number of retrofits done during the COVID-19 pandemic. He suggested, especially with the UCLA data, looking at EBB

retrofits versus non-EBB retrofits. He asked if prices are inflated when contractors learn that the government is covering some of the cost.

Ms. Maffei agreed that this is an issue because the EBB grants set the floor. No one goes below it.

Ms. Hogan stated the only variance pre- and post-COVID was the amount of time it took to get a retrofit done because building departments were closed and it was harder to access individuals to do the work. The materials, labor, and overall retrofit costs were marginal – less than a \$300 difference between pre- and post-COVID.

**[Note: Agenda Item 6 was taken out of order and was heard before Agenda Item 4.]**

**6. Professor Henry Burton will present findings from a study that investigated the extent to which the distribution of cripple wall retrofits in residential buildings (primarily one- and two-family units) located within the City of Los Angeles varies based on the sociodemographics of the affected populations.**

Chair Johnson introduced and welcomed Dr. Henry Burton and asked him to give his presentation on the findings from a study done at UCLA.

Henry Burton, Ph.D., Associate Professor of Civil and Environmental Engineering at UCLA, stated this study was funded by the Ralph J. Bunche Center for African American Studies at UCLA. He introduced the members of this team and provided an overview, with a slide presentation, of the background and goals of the study, description of the relevant data fields, and results of the Equity-Based Analysis of Cripple Wall Retrofits in Wood-frame Residential Buildings in the City of Los Angeles.

Dr. Burton summarized the findings of the study as follows:

- Distribution of EBB eligibility was consistent with the high-level goal to focus on ZIP Codes with the highest seismicity and oldest buildings.
- Despite generally occupying older buildings, the neighborhoods with the highest representation of Black, Hispanic, and low-income households have retrofit rates that are lower than the rest of Los Angeles City.
- Disparities in the retrofit rate based on race and ethnicity, income, and education significantly reduced from 2013-onwards (after the EBB program was introduced) relative to pre-2013.
- By all metrics, the retrofit rate in Hispanic households remains significantly below that of all Los Angeles City.

Dr. Burton stated possible future joint research with the CEA are as follows:

- Quantify the influence of the EBB program on non-funded retrofits.
- Perform equity analysis based on composite variables of socioeconomic vulnerability.
- Quantify the effect of retrofit (and the associated disparities) on neighborhood- and regional-level risk in Los Angeles City.

### Discussion

Chair Johnson asked about the socioeconomic data used.

Dr. Burton stated the socioeconomic variables were based on 2020 Census data.

Ms. Maffei noted that this study came before the CRMP Supplementary Grant Program that offered significantly more to low or moderate incomes. Very different results would be seen in Northern California because of the cost differential. She stated she is interested in how to change the numbers in Hispanic neighborhoods. When the CEA moves to renters, there will be another dynamic, since the reason for doing a retrofit is the return on investment for the owner.

Chair Johnson asked about the dates included in the study.

Dr. Burton stated retrofit data was included in the study through May of 2022.

Chair Johnson suggested comparing before versus after the EBB Program began saturating as part of the future joint research to quantify the influence of the EBB program on non-funded retrofits.

Vice Chair Nezhura asked about the impetus behind looking at this topic.

Dr. Burton stated the motivation behind this study was based on two things: the George Floyd incident in the summer of 2020, which caused much discussion around Black and Brown communities, and the CEA-Pacific Earthquake Engineering Research Center (PEER) Research Project on residential seismic retrofits, which was published in the fall of 2020.

Vice Chair Nezhura suggested doing a follow-up study in approximately one year to study improvements made by the Supplementary Grant and the ESS Programs.

Mr. Welsh asked how Board Members can use the research findings to create action items that continue the progress, such as outreaching to communities with disproportionately older, more vulnerable homes.

Dr. Burton stated the city's data used for the study did not show which homes have EBB-funded retrofits. The 2013 timeline was used to compare disparities in retrofit rates pre- and post-EBB program. He stated a benefit of using city data is that it can be used to tell stories about the retrofit rate prior to the EBB program. The Bunche Center and UCLA in general are interested in highlighting this study as a success story of the EBB program. There are many ways to think about how this data can be presented and used not just to highlight the success of the program but to share with communities that retrofitting homes should be taken advantage of to preserve the value of homes.

Chair Johnson asked if displacement and gentrification issues were embedded in the data.

Dr. Burton stated that came up in the study and the research team submitted a paper on it. The pre-2013 retrofit data shows correlation with gentrification patterns but the team chose not to highlight or discuss it in both the paper written or during today's presentation because it is part of a larger investigation. It is an issue that is worth looking into much deeper.

Chair Johnson agreed and stated the work of the Displacement Center at UC Berkeley lacks looking at structure quality. She suggested that UCLA work with UC Berkeley to help them think about displacement and gentrification as well. This phenomenon is currently happening as neighborhoods are upgraded seismically, values have been going up, and people have been displaced.

## Public Comment

G. DeCoteau asked about the cutoff date for the pre-2013 data.

Dr. Burton stated the cutoff date was 1999.

Chair Johnson stated the CRMP would welcome the talking points that are developed as part of the distillation process of this study.

David Bonowitz stated one of the most interesting things he saw in the data presented was that the high-rate neighborhoods increased over time while the low-rate neighborhoods decreased. Part of this might be correlated with the EBB project.

Dr. Burton agreed that the rate of retrofit can not only be looked at pre- and post-2013 but over time; however, it must be kept in mind that the data being used is not EBB data. UCLA is working with the CEA on more granular data. He agreed with the need for anecdotal evidence.

David Bonowitz asked if the study team can look at the distinction between EBB participation or if a culture of retrofit exists in high-rate neighborhoods. Over time, a kind of social network theory might be seen with or without the subsidy with more individuals understanding that retrofit is normative. He asked for more detail on the culture of retrofit.

Dr. Burton stated, when looking at the top-ten neighborhoods with the highest representation of Black individuals, there was a variance in the normalized retrofit so that, while the average came out below the rest of the city, there were one or two neighborhoods above. He stated he is interested in connecting with individuals in those neighborhoods to better understand if something is happening specifically within these neighborhoods to drive the unusually high rates. He stated he will be looking into this in the future.

Ms. Maffei asked when the paper will be published.

Dr. Burton stated the paper was sent to Spectra for feedback.

Chair Johnson stated, thinking about the culture of retrofit, various components of the EBB program can be looked at, particularly the contractor directory and database and the outreach to building departments. Contractors should expect to see an uptick in their work as they gain more confidence and see that it is financially viable to undertake this work. This also could be adding to the culture of retrofit seen happening in certain neighborhoods.

Charlotte Fadipe, Chief Communications Officer, CEA, stated the importance of publicizing this study. She stated she is interested in the culture of retrofit and the differences between the neighborhoods that have embraced retrofitting as opposed to those that have not.

### **7. Public comment on items that do not appear on this agenda and public requests that those matters be placed on a future agenda.**

There were no questions or comments from the public.

### **8. Adjournment.**

There being no further business, the meeting was adjourned at 2:54 p.m.