



A NEW APPROACH TO EARTHQUAKE INSURANCE FOR CONDO OWNERS

August 24, 2019



Agenda

- A quick (and timely) refresher on earthquake risk
- HOA-specific risk factors
- Review of earthquake traditional insurance options for HOAs and unit owners
- Introduction to the Motus Program
 - Great initial response from BAPS clients

Some quick facts on Ridgecrest...



- July 5th's main shock of magnitude 7.1 released 11x more energy than July 4th's foreshock of magnitude 6.4
- Over 3,000 individual earthquakes have occurred on the affected fault since the initial shock on July 4th
 - 420 events greater than magnitude 3.0
 - 54 greater than 4.0
 - 7 greater than 5.0
- There was a 30% of a >6.0 magnitude event the week after the main shock
 - 10% chance of a >7.0 magnitude event
- Caltech's noted seismologist, Dr. Lucy Jones, has commented "This is a very energetic sequence that could last months, if not years"
- In Los Angeles, more than 125 miles away, the earthquake felt like a magnitude 4.5
 - Felt as far away as Mexico and Las Vegas



CA Earthquake History

Ridgecrest – **at 7.1** – is a stark reminder of the last two earthquakes that devastated California's two major metropolitan areas...



Northridge (1994) – M 6.7

- Occurred on a blind fault
- \$40 billion in damages
- 84% of damaged residential units were multifamily structures (condos & apartments),
- 72% of red tagged units were multifamily structures, roughly \$10 billion of capital losses came from these structures.
- Single-family homes experienced roughly 14% of damaged units however only 4% of red tagged units



CA Earthquake History (cont)

Loma Prieta (1989) – M 6.9

- 63 people killed, more than 3,700 injured
- Damaged or destroyed 12,000 homes and caused more than \$6 billion in property damage.
 - In all, more than 3,000 people were left homeless after the Loma Prieta earthquake.
- 9,000 of 12,000 totally damaged units were multi-family
- Majority of damage more than 50 miles away from epicenter





CA Earthquake Future

- Ridgecrest was well within the USGS's latest estimate (2015)
 - Predicted a >93% chance of a magnitude 7.0 earthquake by 2043

Ridgecrest doesn't decrease the risk to the Bay Area and Greater LA / San Diego...if anything, it increases the near-term risk

- The 2015 report predicts that by 2043:
 - A 72% chance of a magnitude 6.7+ earthquake in the Bay Area
 - A 60% chance of a magnitude 6.7+ earthquake Greater LA
- Statewide, the USGS predicted a 48% chance of a magnitude 7.5 earthquake
 - **16x stronger** than Northridge






UCERF3: A New Earthquake Forecast for California's Complex Fault System

With innovations, fresh data, and lessons learned from recent earthquakes, scientists have developed a new earthquake forecast model for California, a region under constant threat from potentially damaging events. The new model, referred to as the third Uniform California Earthquake Rupture Forecast, or "UCERF3" (<http://www.WGCEP.org/UCERF3>), provides authoritative estimates of the magnitude, location, and likelihood of earthquake fault rupture throughout the state. Overall the results confirm previous findings, but with some significant changes because of model improvements. For example, compared to the previous forecast (UCERF2), the likelihood of moderate sized earthquakes (magnitude 6.5 to 7.5) is lower, whereas that of larger events is higher. This is because of the inclusion of multifault ruptures, where earthquakes are no longer confined to separate, individual faults, but can occasionally rupture multiple faults simultaneously. The public-safety implications of this and other model improvements depend on several factors, including site location and type of structure (for example, family dwelling compared to a long-span bridge). Building codes, earthquake insurance products, emergency plans, and other risk-mitigation efforts will be updated accordingly. This model also serves as a reminder that damaging earthquakes are inevitable for California. Fortunately, there are many simple steps residents can take to protect lives and property.

What is UCERF3?

California is sandwiched between the Pacific and North American tectonic plates, with the former migrating northwest about two inches per year compared to the latter. The plate boundary is far from smooth, reflecting more of a fragmented zone locked in a tectonic battle over which areas will give way, producing some of the steepest mountain ranges in the world. The sliding between plates is also not steady, but rather plays out in fits and starts with periods of rest interrupted by sudden slip along cracks in the Earth. These "fault ruptures" in turn cause the ground to shake, much like the ripples that radiate from a pebble tossed in a pond, and it is this shaking that causes the most damage in earthquakes.

Two kinds of scientific models are used to help safeguard against earthquake losses: an Earthquake Rupture Forecast, which tells us where and when the Earth might slip along the state's many faults, and a Ground Motion Prediction model, which estimates the subsequent shaking given one of the fault ruptures. UCERF3 is the first type of model, representing the latest earthquake-rupture forecast for California. It was developed and reviewed by dozens of leading scientific experts from the fields of seismology, geology, geodesy, paleoseismology, earthquake physics, and earthquake engineering. As such, it represents the best available science with respect to authoritative estimates of the magnitude, location, and likelihood of potentially damaging earthquakes throughout the state (further background on these models, especially with respect to ingredients, can be found in U.S. Geological Survey Fact Sheet 2008–3027, <http://pubs.usgs.gov/fs/2008/3027/>).

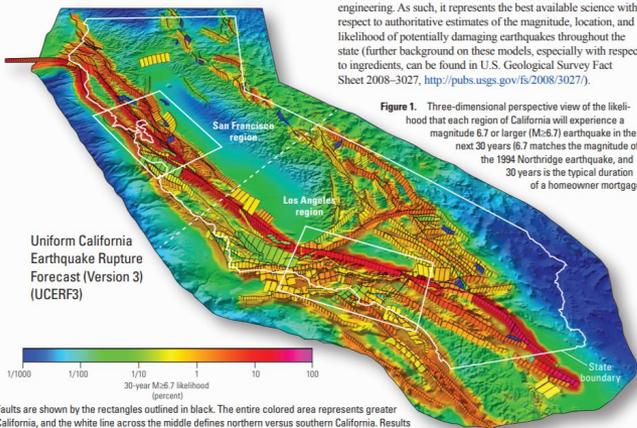


Figure 1. Three-dimensional perspective view of the likelihood that each region of California will experience a magnitude 6.7 or larger (M=6.7) earthquake in the next 30 years (6.7 matches the magnitude of the 1994 Northridge earthquake, and 30 years is the typical duration of a homeowner mortgage).

Uniform California Earthquake Rupture Forecast (Version 3) (UCERF3)

U.S. Department of the Interior
U.S. Geological Survey

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HOA-Specific Risk Factors

- Soil types – liquefaction vs bedrock
- Construction type
- Parking type – Soft-story/tuck-under
- Slip-strike fault vs subduction zone
- Number of stories
- Distance from fault
- Age of construction



HOA EQ Insurance Options

- **The Master Policy option**
- **Unit owner earthquake HO-6 policy/endorsement**
- **The Motus Earthquake Insurance Program**

HOA EQ INSURANCE OPTIONS: The Master Policy Option



Master Earthquake policy / Difference in Conditions (DIC) policy

- Community can purchase an earthquake insurance policy for the entire association
- Community can buy full coverage to rebuild the community
- Community can buy partial coverage/Stop-loss
- Deductible is typically a percentage of the total insurable value and on a per building basis
- Policy built and underwritten on the unique exposures of each HOA
- The best way to ensure there is enough capital available to repair / rebuild after a major earthquake

What is DIC (difference in conditions)?

- Policy designed to broaden coverage, fill in the gaps of the traditional fire policy
- Provides additional limits of coverage for specific perils
 - Typically earthquake or flood

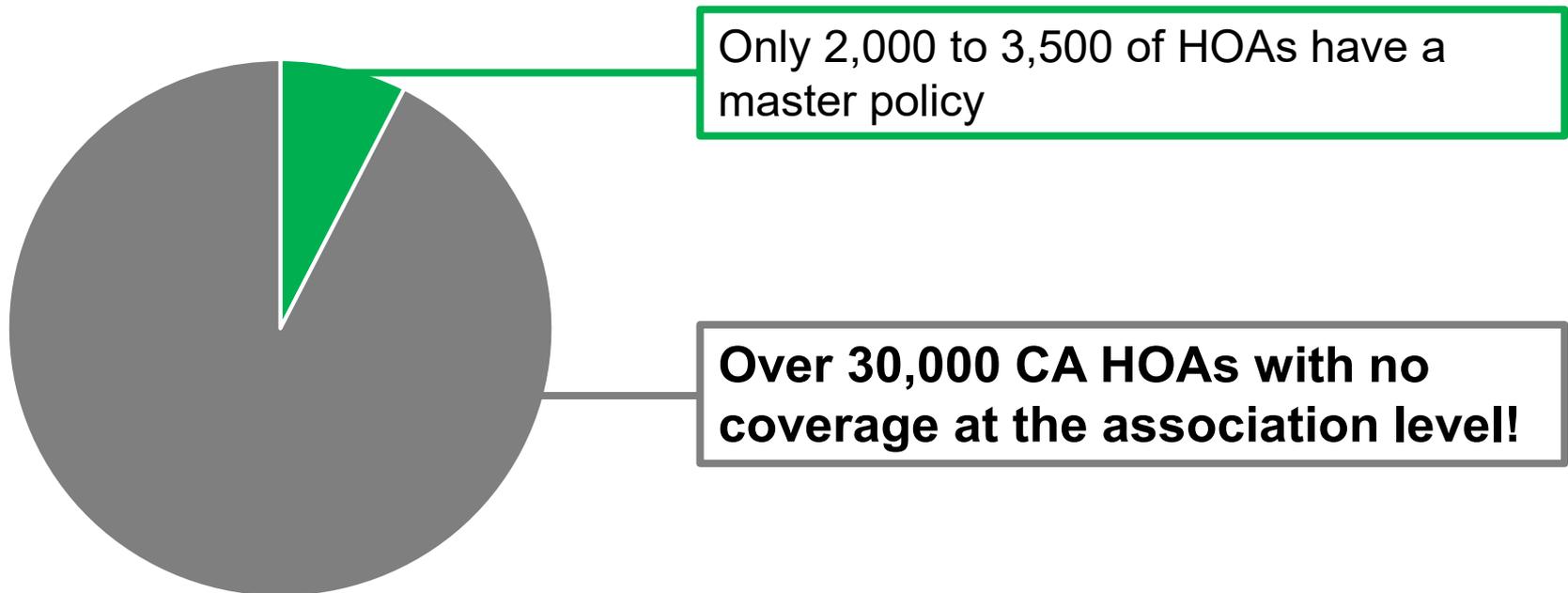
So why wouldn't a board purchase a master policy?

- COST, must be paid through already strained budgets
- DIVISIVE, all must participate
- OFTEN requires membership vote, tough to approve

HOA EQ INSURANCE OPTIONS: Master Policies in Practice



- There are roughly 35,000 “condo” HOAs in California
 - Includes co-ops, townhomes, TICs, timeshares, etc.
 - Excludes Planned Unit Developments
- Of these 35,000 HOAs, only 7% to 10% have master EQ insurance policies



HOA EQ INSURANCE OPTIONS: Individual HO-6 Companion Policy



- **Individual earthquake insurance (CEA) – HO-6 companion policy**
 - When HOAs do not purchase a master policy, owners can purchase property coverage through The California Earthquake Authority (CEA)
 - Primary focus is limited to interior unit coverage and personal property

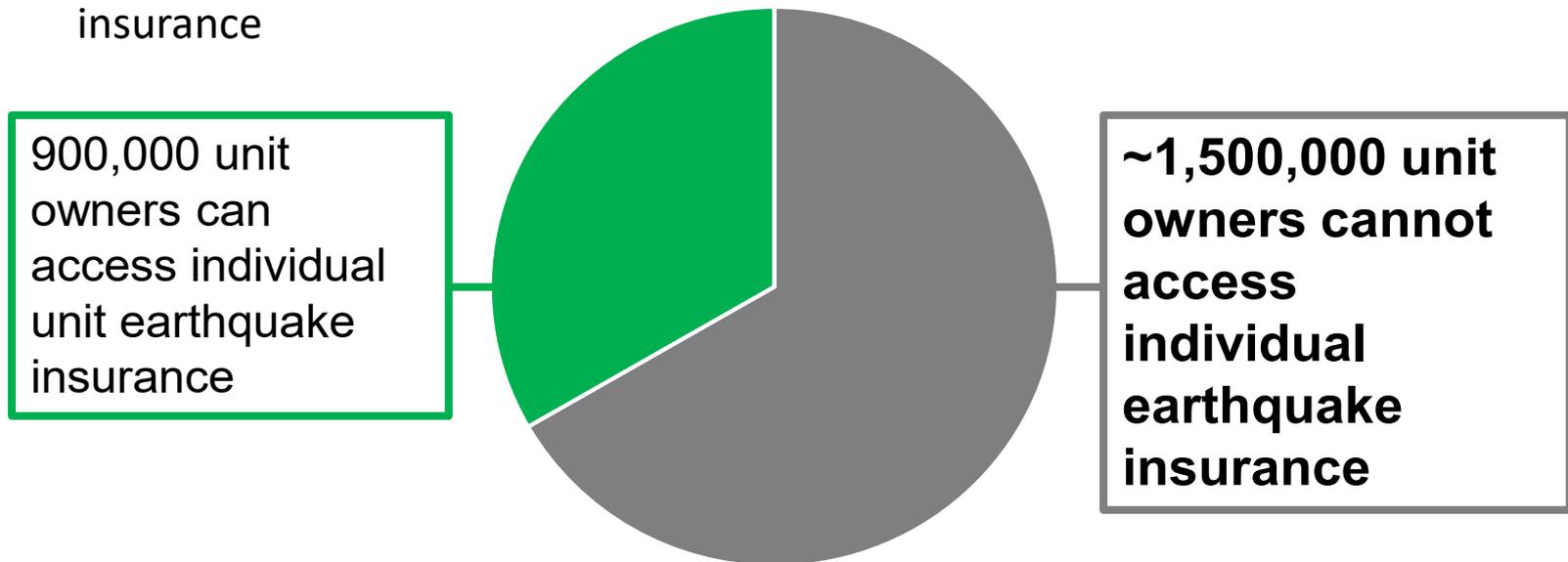
THREE MAJOR PROBLEMS WITH HO-6 Option

- 1) Can't buy full loss assessment coverage, the critical coverage
 - Up to \$100,000 of loss assessment coverage for damage to building – but excludes all commercial elements (foundations, underground pipes, all common area amenities)
 - Loss assessment exposures can be as high as \$10 million dollars for units in high-rises
- 2) Rates for this policy are usually **2.5x to 7x more expensive** than a master earthquake policy or CEA's rates for single family homes
- 3) Can only be purchased if owner has an HO-6 fire policy – Companion policy provision

HOA EQ INSURANCE OPTIONS: The Companion Policy Problem



- Among California's 35,000 associations, there are between 2,400,000 and 2,700,000 individual units
- There are only 900,000 HO-6 fire policies in force in California (individual unit owner fire insurance) –
- Companion policy provision: requires a HO-6 fire policy before buying individual earthquake coverage
 - The remaining ~1,500,000 unit owners cannot access individual earthquake insurance



HOA EQ INSURANCE OPTIONS: The Motus Program



- **Motus is hybrid between the master policy and the CEA-type policies**
 - No HO-6 policy required
 - All unit owners can access master earthquake policy rates and coverages
 - Policies built and underwritten for that exact association
 - Unit owners choose whether they would like to purchase (“opt-in” or not “opt-in”)
- Board, rather than purchasing a master earthquake policy, forcing all unit owners to participate, to be paid through the budget (increasing dues and upsetting many owners) pays between \$950-\$3,000 to enroll in Motus
 - Enrollment fee/premium gets \$10,000-\$100,000 of earthquake coverage for HOA common areas but more importantly allows all units access to affordable, comprehensive insurance

HOA EQ INSURANCE OPTIONS: The Motus Program (cont.)



- **Once the board enrolls the HOA, each unit owner who wants earthquake coverage can purchase their pro-rated share of that master policy**
 - Covers unit-owners liability from damages to buildings, foundations, parking garages, underground pipes and common area amenities
 - Coverage includes unit interior damage
 - Can buy FULL COVERAGE (loss assessment)
 - Usually 2-8 times cheaper than the individual HO-6 option
- During 30-45 day enrollment, Motus will host multiple webinars to educate all unit owners on their exposures from an earthquake
- Guarantees cash payout if the association does not rebuild

HOA EQ INSURANCE OPTIONS: Summary



	MOTUS PROGRAM	MASTER POLICIES	CEA POLICIES
Full Building Coverage Available	✓	✓	✗
Common Area Coverage	✓	✓	✗
Interior Coverage	✓	✗	✓
Guarantees All Owners Participate	✗	✓	✗
Custom Built Policy	✓	✓	✗
Board Can Track Insurance Coverage	✓	✓	✗
No / Minimal Upfront Obligation for HOA	✓	✗	✓
Individuals Can Opt-in	✓	✗	✓



Starting the Conversation

1. Get your boards talking about earthquake risk
2. Help them understand the options available – and their responsibility to consider those options
3. Make sure they evaluate the impact of their decisions on individual unit owners
4. Reach out to Motus if you have any questions



The Motus Process

- 1) Send Motus a statement of values for the HOA
- 2) Motus develops a proposal (usually ~1 week)
- 3) Board evaluates and approves the program
- 4) Motus launches and runs the process (45 days)

Case Study: Bay Area HOA



- 488 units with waterfront exposure
- Total reconstruction cost: \$170mm
 - Average unit exposure: \$350,000
- **Motus Proposal:**
 - \$350,000 of coverage for \$543/year
 - Up to \$430,000/unit available
 - Covers special assessments, interior damage, foundations and common areas
- **CEA Alternative:**
 - \$100,000 of special assessment coverage (max) for \$1,211/year
 - \$100,000 of interior coverage (max) for \$472/year
 - Excludes common areas & foundations
- **RESULT:** Approximately 15% take-up in the first year
 - \$44 million in new capital available to help rebuild after an earthquake

Case Study: Downtown LA High-Rise



- 255 luxury condos in a 32-story high-rise
- Total reconstruction cost: \$105mm
 - Average unit exposure: \$430,000
- **Motus Proposal:**
 - \$430,000 of coverage for \$1,235/year
 - Up to \$520,000/unit available
 - Covers special assessments, interior damage, foundations and common areas
- **CEA Alternative:**
 - \$100,000 of special assessment coverage (max) for \$1,045/year
 - \$100,000 of interior coverage (max) for \$408/year
 - Excludes common areas & foundations
- **RESULT:** Approximately 15% take-up in the first year
 - \$18 million in new capital available to help rebuild after an earthquake

Case Study: Palm Desert HOA



- ~500 single-story units, predominantly townhouses, plus clubhouse
- Total reconstruction cost: \$250mm
 - Average unit exposure: \$520,000
- **Motus Proposal:**
 - \$520,000 of coverage for \$1,957/year
 - Up to \$640,000/unit available
 - Covers special assessments, interior damage, foundations and common areas (including clubhouse)
- **CEA Alternative:**
 - \$100,000 of special assessment coverage (max) for \$1,577/year
 - \$100,000 of interior coverage (max) for \$640/year
 - Excludes common areas & foundations
- **RESULT:** Approximately 20% take-up in the first year
 - \$40 million in new capital available to help rebuild after an earthquake

Case Study: Wine Country HOA



- 38 unit, 2-story HOA
- Total reconstruction cost: \$7.6mm
 - Average unit exposure: \$200,000
- **Motus Proposal:**
 - \$200,000 of coverage for \$720/year
 - Up to \$250,000/unit available
 - Covers special assessments, interior damage, foundations and common areas
- **CEA Alternative:**
 - \$100,000 of special assessment coverage (max) for \$933/year
 - \$100,000 of interior coverage (max) for \$358/year
 - Excludes common areas & foundations
- **RESULT:** Approximately 35% take-up in the first year
 - \$3.6 million in new capital available to help rebuild after an earthquake