



# US Resiliency Council

## USRC Transaction Rating and Due Diligence

### The USRC Transaction Rating - an Enhanced PML

- Used for financial due diligence
- An upgrade on the existing but fractured PML system
- Performed by certified professionals
- Subject to random technical audit
- Transparent – use of national standards
- Credible – designed to prevent manipulation

The USRC Transaction Rating gives your team a reliable transactional due diligence report for making well-informed property investment decisions and managing risk exposure, accommodating both the schedule and cost demands of the leasing, sales, finance, and insurance representatives of the real estate industry. Random technical reviews of your Transaction Rating are performed to maintain credibility. Your Transaction Rating is limited to three stars in each dimension and registration with the USRC is confidential. It also provides a means to deliver consistent information regardless of the engineer performing the evaluation.

To produce the Transaction Rating the USRC certified engineer will do all the analysis required for a PML and then some. As such, the USRC rating can easily be an added requirement to a typical PML due diligence checklist. A USRC Transaction Rating provides more information, including a building’s level of seismic safety as well as estimating the likely time to regain basic function.

**Greg Michaud - Chair of the Commercial Real Estate Finance Council & Head of Real Estate Finance, Voya Investment Management**

*“Seismic due diligence is very important to the commercial lending and real estate industries. Many in the commercial real estate industry consider the current state of PML reporting to be fractured : lacking consistency, credibility, and professional licensing verification. Just as the accountants created the PCAOB (Public Company Audit Oversight Board) to provide credibility to their members audit reports, I am encouraged that the structural engineering profession is finding ways, such as the USRC, to provide consistency, audit procedures and a revocable certification to those who prepare this critical piece of transactional due diligence.”*

The USRC provides two types of seismic ratings:

- 1. A USRC Transaction Rating** is used for transactional due diligence that accommodates both the schedule and cost demands of the leasing, sales, finance and insurance markets for commercial real estate.
- 2. A USRC Verified Rating** is used for promotional, marketing and publicity purposes. A USRC Verified Rating includes a technical review of each building evaluation prior to its issuance.

Comparison of PML and USRC Transaction and Verified Ratings				
FEATURES		Current Industry Practice - PML	US RESILIENCY COUNCIL	
			TRANSACTION RATING (ENHANCED PML)	VERIFIED RATING
RATING	RATING DESIGNATION	0-100%	One to Three Stars Each Star has a specific threshold (e.g. three star <20%)	One to Five Stars Each Star has a specific threshold (e.g. five star <5%)
BUILDING PERFORMANCE DIMENSIONS	Safety	Sometimes Excluded	✓	✓
	Damage	✓	✓	✓
	Recovery	Almost always Excluded	✓	✓
SPECIAL FEATURES	Identifies Location of Damage	No	Available with FEMA P58 Methodology	Available with FEMA P58 Methodology
	Usable for Advertising & PR	No Controls	Not Allowed	✓
QUALITY CONTROL AND TRANSPARENCY	Evaluator Qualifications	Voluntary Compliance	State Licensed Engineer + Min 5 years experience + USRC Training & Certification	State Licensed Engineer + Min 5 years experience + USRC Training & Certification
	Latest ASTM Compliance	Voluntary Compliance	✓	✓
	Certification of Engineer’s Qualifications	None	✓	✓
	Engineer’s Stamp Required	Voluntary Compliance	✓	✓
	Third Party Technical Review	None	1 in 7 at random - after the fact	All - prior to issuance

**The USRC Transaction Rating – a Logical Replacement or Addition to a PML Evaluation:** A USRC Transaction Rating requires the USRC certified engineer to do all of the work needed to produce a traditional PML report, plus additional engineering analysis. Use of the FEMA P58 methodology provides more information as well as consistency, transparency, and credibility. Each of the star rating categories of a USRC rating corresponds to a specific replacement cost threshold level (e.g. Damage: 1 star > 40%; 2 stars < 40%; 3 Stars < 20%). Less than 10% and <5% replacement cost threshold checks are available only for 4 and 5 stars with the USRC Verified rating).

**The USRC Verified Rating – the Highest Level of Credibility:** The enhanced level of credibility of a USRC Verified Rating can make a property stand out and may make the rating more portable; i.e. accepted by competing buyers or lenders for the proposed transaction, thus, speeding up the closing process and providing a higher certainty of closing.

**Qualified Professionals:** A USRC Earthquake Rating is developed by a USRC Certified Rating Professional (CRP) who:

1. Must be approved by the USRC Certification Committee,
2. Must be a state registered engineer,
3. Must have a minimum of 5 years of significant structural experience in building design and evaluation,
4. Must carry current E&O insurance, and
5. Must submit USRC Earthquake Ratings for audit (Transaction Rating) or verification (Verified Rating).



<b>Safety</b>	★★★★★
<b>Damage</b>	★★★★★
<b>Recovery</b>	★★★★★



The CRP is trained in the use of USRC rating procedures and tools. USRC Certification must be renewed every year and subject to periodic mandatory training on new industry standards and USRC procedures.

**Subject to Audit:** The USRC provides the oversight that is currently lacking in the field of seismic due diligence. Just as CPAs established the PCOB to certify auditors for public companies and securities and randomly audit the PCOB member's audits, the USRC has created a similar technical review system. The USRC uses Certified Rating Reviewers (CRR) to randomly audit USRC Transaction Ratings. USRC CRR's are state licensed engineers currently practicing structural engineering with at least ten years of experience in the design and evaluation of buildings subject to earthquakes and other natural hazards.

**Methodologies are Transparent and Credible:** USRC technical methodologies used to develop a USRC rating are state of the art, industry standard, and openly available with little left to the judgment of the CRP. These are not "black box" systems, so all components of the evaluation are transparent. The USRC rating system is designed to prevent gaming to achieve a desired result, i.e. two CRP's should come to a similar result if they use the same methodology to rate the same building.

**Portable:** Because a USRC Transaction Rating is transparent and credible, it is more likely to be portable than current PML reports. Lenders, investors, buyers, and tenants are more likely to rely on a USRC Transaction or Verified Rating and not require the building to be evaluated by several parties for seismic due diligence purposes.

**Easy for the Public to Understand:** The USRC Rating has all the information needed for a PML and in addition it communicates levels of performance to non-technical audiences within the thresholds common to a PML report.

**Detailed Back-Up Information:** The report that supports the USRC Transaction Rating provides more detail and technical documentation than is currently provided in a typical due diligence or ASTM PML seismic evaluation. The rating developed with the FEMA P58 methodology considers the performance of a building's structure, its mechanical, electrical and plumbing systems, and architectural components such as cladding, windows, partitions, and ceilings. The performance of these elements affects occupant safety, the cost and time to carry out necessary repairs, and when you can begin using the building following an earthquake.

**Lucile Jones USGS Seismologist and Past Science Advisor to Los Angeles City Mayor Eric Garcetti**

*Across the Nation, people are making significant financial decisions about buildings often without adequate information about the vulnerability of those buildings to earthquakes. The USRC Rating System is credible, consistent and transparent and would make a better foundation for those critical decisions.*

**For more information, visit us at: [www.usrc.org](http://www.usrc.org)**