

# Lum Safety Assessment Demand

To the:

Alameda Board of Education

May 9, 2017

[www.Lumdac.org](http://www.Lumdac.org)

# Lum is SAFE

From ZFA report to the District:

“...California Building Code would **not** require that the buildings or site be vacated by district.”

**Therefore**

- Lum can be a school indefinitely.
- The risk is not immediate nor imminent.
- This is not cause for immediate or near term closure of Lum.

# Follow Cal DoE Best Practice for non-emergency School closures

This is a non-emergency closure with District budget impact regardless of decision.

- Cost to gather complete earthquake safety analysis in accordance with State Building codes
- Cost to explore design options for retrofit of existing facilities
- Cost to implement retrofit
- Cost of relocation of students
- Disposal of Lum
- Cost to rebuild Lum

The California Department of Education on budget based closure “The Decision to close a school is anguishing. It profoundly affects parents, neighborhoods, communities, district personnel, and, of course students. It affects relationships, routines, and cherished territorialities. In short, it alters not only district operations but also lives.....” <http://www.cde.ca.gov/ls/fa/sf/schoolclose.asp>

Lum does not pose an “*imminent hazard*”:

**Closure should be the LAST Option**

**Therefore**

**Defer** the vote until May 2018

**Demand** recognition as District Advisory Committee (DAC), Cal DoE best practice

**Produce** Structural Analysis study and Hazard Mitigation plan

**Direct** the DAC to create and deliver recommendations on or before May 2018

# Inadequate Safety Assessment Creates Fear

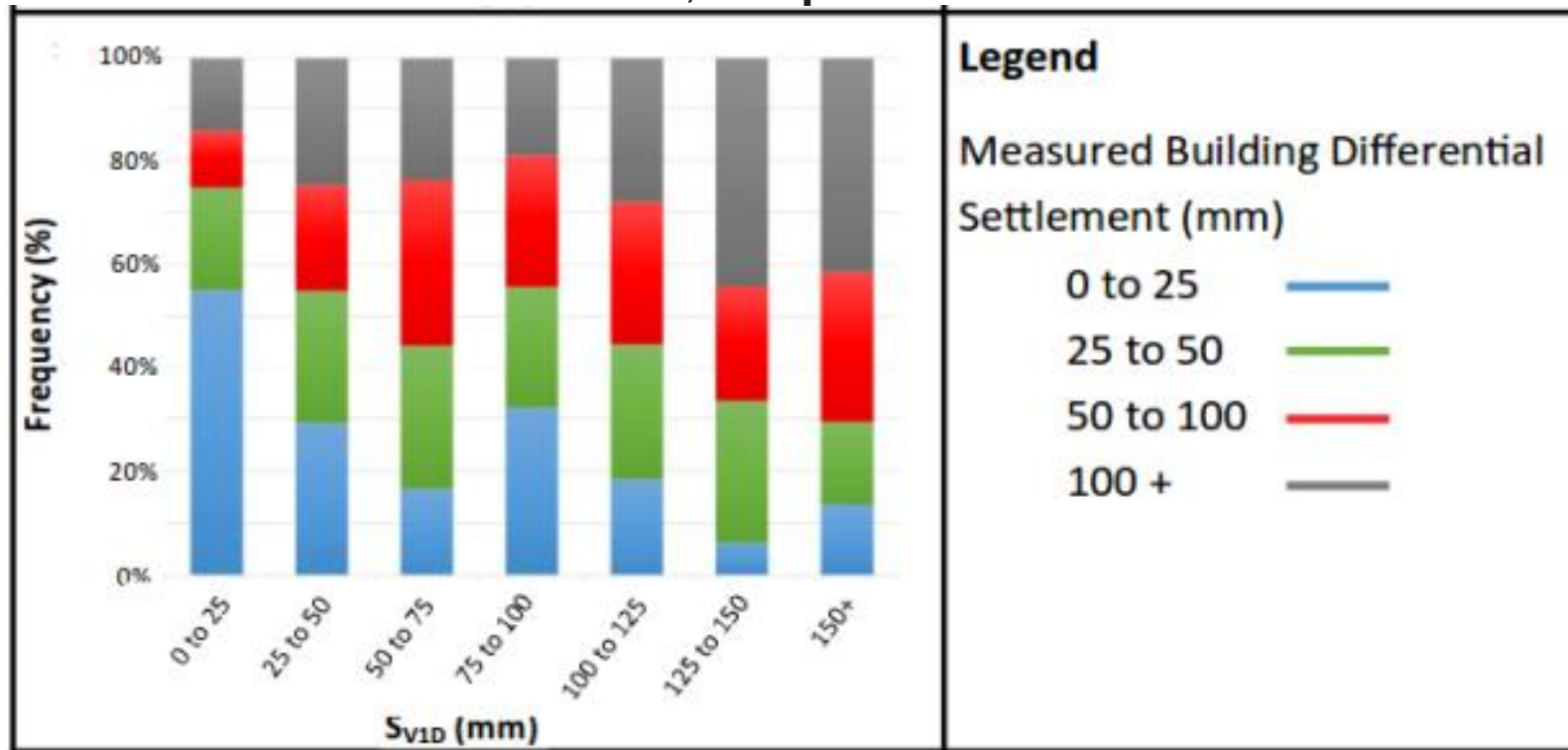
When no imminent danger exists, it:

- **Potentially expose our students and staff to higher earthquake risk**
- Negatively impacts family welfare
- Reduces student performance
- Increases traffic
- Causes undue cost to the District
- Destabilizes Alameda home values
- **Opens up District to further liability**

# Rob Dekker

Lum Parent, MSc EE, Founder and CTO Verific Design Automation

Correlation between CPT settlement parameter and Building Differential Settlement, **Chapman et al 2015**



Almost **no experimental correlation between Cone Penetration Tests (CPT) and differential settlement**. Providing a **50/50 chance** that Lum is as safe as any other school if **evaluated using CPT**.

# Tai Tang

Lum Parent, Licensed Architect - Michigan

“If indeed one corner of the building sunk the maximum estimated 10”...steel structures should be able to accommodate 1% movement with ease.”

# Calvin Wong

Alameda Resident, Retired City Engineer and Chief Building Official City of Oakland – 32 years of Experience

“..you haven’t adequately completed your **due diligence** for determining if the building is unsafe.

A conservative decision to close the school without adequate documentation could be **more detrimental and subject the school to potential liabilities.**

There are steps you need to take.....determine if buildings can meet...”Essential Life Safety” aka SPC2...approved by an independent 3<sup>rd</sup> party....”



# Lum is SAFE, Follow Best Practices, Assess Safety and REBUILD OUR TRUST

“Lum **complies with DSA safety** requirements and can be **used indefinitely.**”

“**Standard ratings** could be used to **evaluate and compare structural performance** during earthquakes called **Structural Performance Categories (SPC)** which should be evaluated on **all AUSD schools.**”

“**More people die** in earthquakes **due to non-structural** than structural damage, so the **Non-structural Performance Category (NPC)** should also be **evaluated at all schools.**”

“Lum buildings are not a lost cause. There **is a cost effective option to retrofit...**”

“A **conservative decision to close** the school without adequate documentation **could be more detrimental and subject the school to potential liabilities.**”

Follow the Cal State Approved Process

because

Your decision Impacts the Whole City