SEISMIC

EVALUATION RESULTS

Whittier/Arts Magnet, Cragmont, Oxford & LeConte Schools AND
ALTERNATIVE
PLANS

## A REPORT TO THE BOARD OF EDUCATION Berkeley Unified School District

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## EXECUTIVE SUMMARY

The Loma Prieta Earthquake of 1989 shook the Bay Area into awareness of the magnitude of the ever present earthquake threat. In the aftermath of the Loma Prieta earthquake, all Berkeley Schools were immediately surveyed by engineering teams to determine the extent of damage. With only minor exceptions, Berkeley school facilities performed well.

On February 21, 1990 the Board of Education took action to be fully prepared for future earthquakes by beginning a seismic evaluation of every District facility. Initial results of the evaluation of six sites are now available. Preliminary evaluations of the remaining District facilities will be available in November, followed in February of 1991 by the Final Report including recommendations for remedial structural actions.

Initially, four schools, Cragmont, Arts Magnet/Whittier CDC, Le Conte and Oxford schools were evaluated. When preliminary information indicated the need to consider relocation of two schools, Cragmont and Arts Magnet/Whittier CDC to other facilities, Franklin and Hillside schools were immediately added to the list to determine their suitability as alternate sites. The results of these evaluations can be summarized as follows:

<u>Cragmont School:</u>
High Probability of Full Collapse in a severe earthquake.

Whittier/Arts Magnet:

Low to Moderate Probability of Partial Collapse in a severe earthquake in two wings of the building; High Probability of Component Failure in those same wings; Not Probable or Low Probability for damage in two other building wings.

Oxford School:

Full or Partial Collapse Not Probable;

Low Probability for Component Failure in a severe earthquake.

Le Conte School:

Full or Partial Collapse Not Probable;

Moderate Probability for Component

Failure in one area in a severe
earthquake. Other areas Not Probable.

Franklin School Site:

Full Collapse Not Probable; Low
Probability for Partial Collapse in four
building elements, Not Probable in the
remaining elements in a severe
earthquake. Low Probability of Component
Failure throughout the building.

## Hillside School Site:

Full or Partial Collapse Not Probable; Low Probability for Component Failure in the Auditorium, Not Probable elsewhere in a severe earthquake.

Upon receiving initial reports of the seismic evaluation of Cragmont and Whittier/Arts Magnet, the Board of Education requested that the BUSD Staff prepare for the October 3, 1990 School Board meeting a list of options for consideration which could mitigate the safety problems indicated by the seismic evaluation.

The development of options focussed primarily on the needs of the two sites, Cragmont and Whittier/Arts Magnet which have the greatest risk for injury to students and staff. Five types of options were considered in compiling this report. They included:

- Maintaining students and staff in their current facilities with temporary reinforcements to mitigate the risk of injury.
- 2. Disbursing students to other sites either on an individual or a class room basis.
- 3. Having the school share a school site with another school with a double shift, (morning and afternoon), schedule.
- 4. Relocating the schools to relocatable (portable) class rooms either at their existing sites or at other locations.
- 5. Re-opening one or both of the currently closed facilities of Hillside School and Franklin School to serve as a temporary or permanent relocation site.

The detailed results of this consideration are presented in the main body of the report. The reader is asked to refer to these explanations for a clearer understanding of the options. A summary of the findings are presented in the Notes and Table below.