STATE ALLOCATION BOARD
SUBCOMMITTEE ON SEIMIC MITIGATION PROGRAM
April 12, 2011

PURPOSE

To present Seismic Mitigation Program updates and a program regulatory amendment proposal in order to promote further participation in the Seismic Mitigation Program.

AUTHORITY

EC Section 17075.10(a) states: "A school district may apply for hardship assistance in cases of extraordinary circumstances. Extraordinary circumstances may include, but are not limited to, the need to repair, reconstruct, or replace the most vulnerable school facilities that are a Category 2 building, as defined in the report submitted pursuant to Section 17317, determined by the department to pose an unacceptable risk of injury to its occupants in the event of a seismic event."

SFP Regulation 1859.82 states: A district is eligible for facility hardship funding to replace or construct new classrooms and related facilities if the district demonstrates there is an unmet need for pupil housing or the condition of the facilities, or the lack of facilities, is a threat to the health and safety of the pupils. A facility hardship is available for: (a) New classrooms and/or subsidiary facilities (corridors, toilets, kitchens and other non-classroom space) or replacement facilities if: The facilities are needed to ensure the health and safety of the pupils if the district can demonstrate to the satisfaction of the Board that the health and safety of the pupils is at risk. Factors to be considered by the Board shall include the close proximity to a major freeway, airport, electrical facility, high power transmission lines, dam, pipeline, industrial facility, adverse air quality emission or other health and safety risks, including structural deficiencies required by the DSA to be repaired, seismic mitigation of the Most Vulnerable Category 2 Buildings as verified by the DSA, traffic safety or because the pupils reside in remote areas of the district and transportation to existing facilities is not possible or poses a health and safety risk. The total available funding for seismic mitigation related and ancillary costs for the Most Vulnerable Category 2 Buildings is $199.5 million for projects where the construction contract was executed on or after May 20, 2006, and the project funding provided shall be for the minimum work necessary to obtain DSA approval.

BACKGROUND

Proposition 1D, approved by California voters in 2006, provided $199.5 million in bond authority for seismic construction projects determined to have "most vulnerable California school facilities" status. As a result, the State Allocation Board (Board) approved amendments to the School Facility Program (SFP) Facility Hardship regulations to create the Seismic Mitigation Program (SMP). The SMP provides grant funds to repair, reconstruct, or replace the "most vulnerable" school facilities, as determined by the Division of the State Architect (DSA). To date, four schools received a total of approximately $19.0 million in SMP funding, unfunded approvals, or conceptual approvals. To be eligible for SMP funding, school facilities must meet certain criteria, such as structural deficiencies that the DSA requires to be repaired, and seismic mitigation of buildings that DSA has verified as the most vulnerable Category 2 buildings.

A school district is eligible for Proposition 1D grant funding to repair, replace or construct new classrooms and related facilities if the school district can demonstrate to the Board that the health and safety of the pupils are at risk. For a school district to receive seismic mitigation funding under the Facility Hardship provisions, the district must have

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BACKGROUND (Cont.)

buildings that 1) are classified as a Most Vulnerable Category 2 Building as verified by the DSA, and 2) are located in an area where a short term spectral response acceleration (also know as Ground Shaking Intensity – GSI) is 1.68g or more. In August 2009 the Board adopted regulations reducing the GSI from a minimum of 1.70g to 1.68g. If all other determining criteria are met per SFP Regulation 1859.82, the applicant school district qualifies for SMP Facility Hardship funding.

In November 2009, the California Seismic Safety Commission (CSSC) provided the Office of Public School Construction (OPSC) with a $200,000 grant to contract for structural engineering services to conduct seismic evaluations. Evaluations were conducted at K-12 public school sites preliminarily identified by the DSA as meeting SMP eligibility requirements. The evaluations were designed to ascertain the seismic vulnerability of certain K-12 school buildings that may be at risk during a seismic event. The contracts also resulted in the development of a seismic evaluation report template which provides a more systematic and cost effective approach for determining the seismic safety status of school facilities within the State. This seismic template has been successfully used in the field for seismic structural evaluations of preliminarily identified qualified school facilities. The template provided a standardized procedure for evaluating the structural risk of facilities, which resulted in rapid seismic evaluations at minimal cost.

As a result of Board approval reducing the GSI to 1.68g, using United States Geological Survey National Seismic hazard maps, the DSA identified 16 school districts as potentially having 48 preliminarily qualified buildings. Nine of the 16 school districts with 38 preliminarily qualified buildings chose to participate in the CSSC grant funded evaluation process. Seismic evaluation reports have been completed for all nine school districts. Of the 38 buildings, 20 have met the eligibility requirements for funding under SMP. These 20 buildings total 260,730 square feet for a building average of 13,037 square feet. The remaining 18 school buildings were ineligible because the buildings are not any of the pre-determined structural types listed in SFP Regulation.

Definition of "Most Vulnerable Category 2 Buildings"

In September 2007, the Board adopted amendments to SFP Regulation Sections 1859.82 and 1859.2(a) to implement the SMP. In August 2009 the Board adopted additional amendments to these regulations with input from DSA, CSSC and the Board Implementation Committee. In order to qualify for Seismic funding, the facility must contain a building with one of the following "Category 2" construction types. (The underlined structural types were approved by the Board in August 2009):

- Concrete Moment Frame (C1), Reinforced Concrete Cantilever Columns with Wood Roofs (C1B), Precast/Tilt-up Concrete Shear Wall with Concrete Floor and Roof Diaphragms (PC1), Precast/Tilt-up Concrete Shear Wall with Flexible Roof (PC1A), Precast Concrete Frame and Roofs with Concrete Shear Walls (PC2), Precast Concrete Frame without Concrete Shear Walls and with Rigid Floor and Roof Diaphragms (PC2A), Concrete Frame with infill Masonry Shear Wall and Flexible Floor and Roof Diaphragms (C3A), or Unreinforced Masonry Bearing Wall Buildings (URM);
- Must be located in a zone where the GSI factor (or short period spectral acceleration) is 1.68g or more based on the United States Geological Survey National Seismic Hazard maps;
- Must be designed for occupancy by students and staff; and,
- Must have an accompanying structural engineer's report identifying the building deficiencies and reasoning for concluding that the building has a potential for catastrophic collapse.

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BACKGROUND (Cont.)

Impediments/Barriers to Accessing SMP Proposition 1D Funding

At the May 6, 2010 Implementation Committee meeting, a discussion was held concerning the barriers school districts encounter accessing SMP funds, and how these barriers could be eliminated. The following issues were identified:

- Lack of funding for up-front costs for a structural evaluation;
- Lack of local match from school districts; and,
- Lack of funding for a separate allowance for interim housing once facilities are identified as needing repair or replacement.

The lack of funding for upfront costs for a structural evaluation has been addressed through the grant funds provided by CSSC and the resulting template. Additionally, $77,000 of the original $200,000 grant to OPSC remains to assist districts in identifying and assessing seismic risk to their facilities.

The SFP does not provide specific additional funding for interim housing expenses under any program – modernization, facility hardship, etc. – where students are displaced. (However, these costs are allowable expenes – meaning that the State grants and local matching funds can be expended to provide interim housing.) The program accommodates Financial Hardship districts by allowing these districts to reserve local funds to meet interim housing needs rather than the district contributing these funds to reduce Financial Hardship funding from the State.

In addition to the overall framework of the SFP, the statute enacting Seismic specifically enumerates three purposes for the funds – to repair, reconstruct, or replace the most vulnerable school facilities. The statute does not authorize a specific grant for interim housing. According to SAB Legal Counsel, implementing a specific grant for interim housing would require legislation.

DISCUSSION

Current Status of Proposition 1D Bond Authority and Impact of Qualified Buildings

Since the inception of Proposition 1D the Board has approved $19,015,705 for four projects. Details are as follows:

District	Type of Project	State Share	Square Footage
West Contra Costa	Replacement-1bldg	$14,302,996	69,635
San Ramon	Replacement-1bldg	$3,658,433	22,187
Piedmont Unified	Rehabilitation-1bldg	$578,439	28,085
Piedmont Unified	Rehabilitation-1bldg	$475,867	5,484
Total		$19,015,705	125,391

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DISCUSSION (Cont.)

Results of Seismic Inspection Program

The chart below illustrates the number of facilities and total square footage that were deemed eligible as a result of the recent Seismic inspection program and the estimated State share.

	Total Number of Facilities Eligible or Estimated Eligible	Square Footage	Estimated State Share, Blended Replacement/Rehab ($208 per Square Foot)	Estimated State Share, if All Projects Qualify for Replacement ($252 per Square Foot)
1.68g+ Qualified Bldgs	20 Buildings	260,730	$54,231,840	$65,703,960
Lower GSI to 1.65	71 Campuses*	Unknown	Unknown	Unknown

*Based on DSA list of all California school districts' GSI factor.

Total Cost Projections

The chart below illustrates the total estimated impact upon Proposition 1D bonding authority for all Seismic projects including funded, unfunded approvals, and currently eligible buildings:

Approved Projects	$	19,015,705
Eligible Buildings		54,231,840 to 65,703,960
Total Project Costs	$	73,247,545 to 84,719,665
Proposition 1D Bond Authority	$	199,500,000
Less Total Project Costs		73,247,545 to 84,719,665
Balance of Remaining Bond Authority	$	126,252,455 to 114,780,335

Amending Program Criteria

The following proposals are submitted for the Subcommittee's consideration:

Option 1:

Lower the GSI factor requirement to 1.65g from 1.68g for a period of six months and continue to lower the threshold by increments of .03g in six month windows until the $199.5 million of Proposition 1D funds are fully subscribed. Each individual district with a qualifying facility shall submit a request for conceptual approval to participate in the seismic program within the six-month window for which the project qualifies or that specific facility project shall become ineligible for the seismic program

Pros:

- Based on the above analysis and current available information, it appears that the SMP funding is more than sufficient to rehabilitate or repair the 20 buildings that have been reviewed by structural engineers and meet SMP eligibility criteria.

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DISCUSSION (Cont.)

- This proposal will facilitate and expedite the identification of additional SMP projects and is recommended by the DSA and the DOF based on a detailed analysis performed in conjunction with the CSSC and verified by a field practitioners group.
- By incrementally reducing the GSI in six month windows, and by linking those intervals with periods of eligibility, the State would be able to provide multiple rounds or opportunities for funding across a potentially greater number of districts. This would allow the State to better gauge local interest, scope and magnitude of facilities that need to be addressed based on local priorities.

Cons:

- Setting the GSI factor too low may divert funds from the "most vulnerable" facilities to less vulnerable facilities.
- Setting the GSI factor too low may leave many projects unfunded and expose school districts to potential liability.
- Reducing the GSI factor to 1.65g or lower may identify more projects than remaining SMP bond authority could fund, which will result in a "first in, first out" funding order.

Option 2:

Re-evaluate the list of potentially eligible buildings to ensure that all school campuses located in zones with a GSI of 1.68g or greater have been identified.

Pros:

- This option will allow more precise identification of the State's most vulnerable school buildings.
- The State's limited resources will be directed to those school buildings that have the highest risk of failure during a severe seismic event.

Cons:

- This option will require more time to identify additional school campuses at risk.
- This option does not address the local match issues that preclude certain districts from requesting SMP funding.