January 10, 2004

The Honorable Arnold Schwarzenegger, Governor Members of the California State Legislature State of California State Capitol, First Floor Sacramento, CA 95814

Dear Governor Schwarzenegger and Members of the State Legislature:

The California Seismic Safety Commission is an independent commission, and was established in 1975 to advise the Governor, Legislature, State and local agencies, and the public about strategies to reduce earthquake risk. The Seismic Safety Commission is pleased to present our Annual Report. This report covers the Commission's earthquake risk reduction activities during the 2003 calendar year.

As discussed in the attached report, the most significant policy issues addressed by the Commission were:

- 1 Non-Field Act Compliant Buildings for Public Schools As mandated by the Legislature, a select committee was convened and issued findings and recommendations for techniques, analysis and processes that could be used to identify or cost-effectively modify, existing Non-Field Act Compliant Buildings so that they are suitable for use as Public Schools.
- 2. **Progress Report on the Earthquake Loss Reduction Plan** As required by the California Earthquake Hazards Reduction Act of 1986, the Plan serves as California's official response for a federally-required hazard mitigation plan for earthquakes, making the state eligible to apply for federal disaster relief funds after major earthquakes. It lists continued developments and achievements California has realized in earthquake loss reduction efforts. Following the 1994 Northridge earthquake alone, the State received \$1 billion in federal funds.
- 3. **Resource Needs of California's Urban Search and Rescue Teams** On September 11, 2002, AB 2002 (Alquist) was signed into law (Chapter 460 Statutes of 2002) establishing the Urban Search and Rescue Emergency Advisory Committee. Attached are the findings and recommendations from the Committee.
- 4. New Earthquake Shaking Potential Map A joint product of the Governor's Office of Emergency Services, California Seismic Safety Commission, the California Department of Conservation, California Geological Survey and the United States Geological Survey.
- 5. Status Report on California's Unreinforced Masonry Building Law The report summarizes the status of local government and building owner efforts to comply with this 1986 law. About two thirds of the 25,500 URM buildings in the highest seismic regions of California have been retrofitted or demolished.

The risk of damage to property and loss of life from earthquakes remains high. We must be committed to the concept of reducing earthquake risk by applying cost-effective, innovative solutions. The Commission continues its efforts in the private sector and with state and local agencies, to ensure that seismic safety remains a priority.

Sincerely,

Ref. micy

Stan Moy, Chairman

Mr. Richard J. McCarthy, Executive Director

To provide decision makers and the general public with cost-effective recommendations to reduce earthquake losses and expedite recovery from damaging earthquakes.

Vision Statement

To provide leadership in implementing and achieving the goals and objectives in the *California Earthquake Loss Reduction Plan*, including, to advance learning about earthquakes and risk reduction in both the short and long term, advance the earthquake resistant designs of buildings and other important structures, and advance the preparedness and emergency response systems to earthquakes.

Commission Membership

1. Stan Y. Moy, Chair	Architectural Planning		
2. Dr. Lucile M. Jones, Vice Chair	Seismology		
3. Andrew A. Adelman	Cities/Bldg. Official		
4. Senator Richard Alarcon	Senate		
5. Supervisor James Beall	County Government		
6. Supervisor Mark Church	Local Government		
7. Dr. Bruce Clark	Geology		
8. Lawrence Klein	Utilities		
9. Assemblywoman Carol Liu	Assembly		
Don Manning, Representative			
10. Linden Nishinaga	City Government		
11. Donald R. Parker	Fire Protection		
12. Celestine Palmer	Insurance		
13. Daniel Shapiro	Structural Engineering		
14. Jimmie R. Yee	Social Services		
15. Vacant	Soils Engineering		
16. Vacant	Mechanical Engineering		
17. Vacant	Emergency Services		
Douglas E. Mochizuki (vacated May 2003)	Emergency Services		

Douglas E. Mochizuki (vacated May 2003)Emergency ServicesAshok Patwardhan (vacated May 2003)Mechanical Engineering

Richard J. McCarthy, Executive Director Karen Cogan, Administrative Manager, Annual Report Editor Robert Anderson, Senior Engineering Geologist Abigail L. Browning, Legislative Intern Sue Celli, Office Manager and Account Clerk Kyshia Davis, Administrative Intern Adam Myers, Administrative Intern Henry Reyes, Special Projects Manager Henry Sepulveda, Legislative Manager Fred Turner, Senior Structural Engineer

Seismic Safety Commission Role, Responsibilities And Ongoing Activities

The California Seismic Safety Commission was established in 1975 to advise the Governor, Legislature, state and local agencies, and the public about strategies to reduce earthquake risk (Government Code Section 8870, et seq.). The Commission is an independent agency composed of 17 commissioners chosen for their technical expertise and experience. The Governor appoints fifteen commissioners to serve or complete a four-year term, and the Senate and the Assembly each choose a representative from their respective membership.

The Commission investigates earthquakes, reports on earthquake-related issues, and evaluates and recommends to the Governor and Legislature policies needed to reduce earthquake risk. To ensure a coordinated framework for establishing earthquake safety policies and programs in California, the Commission:

- Uses the expertise of members' experience in earthquake-related fields, to review, evaluate, and translate technical information and make recommendations to propose, develop, and shape earthquake safety policies;
- Coordinates the State's mitigation efforts through publication and promotion of the *California Earthquake Loss Reduction Plan* as required by the California Earthquake Hazards Reduction Act of 1986. This continually-updated five-year plan fills several needs:
 - (1) California's Earthquake Loss Reduction Plan is the State's policy statement describing what actions need to be taken to reduce earthquake risk;
 - (2) The Plan serves as the State's strategic plan, guiding the executive and legislative branches with overall implementation strategies and priorities for seismic safety; and

- (3) The Plan serves as California's official response for a federally-required hazard mitigation plan for earthquakes, making the State eligible to apply for federal disaster relief funds after major earthquakes.
- Responds promptly after earthquakes to gather new information, support emergency response efforts, improve communications, and recommend policy changes to apply lessons learned from these events;
- Creates and directs specialized committees of experts from the private and academic sectors and representatives of state and local government agencies, directing those committees to investigate specific policy areas and recommend regulatory changes and legislation to the full Commission and Legislature for action;
- Oversees the Strong Motion Instrumentation Advisory Committee (SMIAC) which was established by law to advise the California Geological Survey on the long term operation and goals of the instrumentation program;
- Exercises leadership in seismic safety issues by conducting public hearings on earthquakerelated topics;
- Offers guidance to increase effectiveness and promote application of loss reduction policies and techniques;
- Educates professionals and the general public about earthquake risk and how to manage that risk through publications and development and distribution of non-technical guides to help homeowners, building owners, and business owners;
- Establishes and maintains relationships with boards, commissions, departments, agencies and other public and private organizations to implement policies to improve seismic safety; and
- Promotes applied research and sponsors training programs to improve construction in the State ranging from the planning stage to ongoing code enforcement.
- Serves on an advisory committee for the California Earthquake Authority.
- Advises the Insurance Commissioner on earthquake loss reduction issues.

The Commission sponsored three important bills in 2003. The Commission also took positions on several bills and tracked over forty measures.

AB 1066, carried by Assembly member Carol Liu (the newly appointed Assembly representative on the Commission), proposed the California Seismic Safety Bond Act of 2004. This bill authorizes the issuance of up to \$700 million in state general obligation funds to provide funding – on a 75:25 matching basis – for the retrofit and reconstruction of local government (essential services) buildings. This bill is on Suspense File of the Assembly Appropriations Committee where it may be taken up in 2004.

AB 1573, authored by Assembly member Ellen Corbett (San Leandro), conforms the contracting standards applicable to K-12 school construction projects with the new standards that apply to design-build projects on community college campuses. These new standards strengthen the role and independence of the independent Inspector of Record to ensure adherence to seismic safety protections. This bill was signed by the Governor on July 14, 2003 and became effective on January 1, 2004.

AB 1576, also carried by Assembly member Liu, authorizes local building enforcement agencies to issue citations to residential rental property owners for failure to comply with existing water heater strapping laws. This bill was signed by the Governor on September 29, 2003 and became effective January 1, 2004.

Commission Appointments Officers and Vacancies

New Officers Installed

On June 12, 2003, the Commission elected Commissioner Stan Y. Moy as Chair and Commissioner Dr. Lucy M. Jones as Vice Chair. Chairman Moy has been a commissioner since May of 2000, and Vice Chair Jones was appointed as commissioner in May of 2002. Their terms as Chair and Vice Chair continue through May of 2004.

Vacancies Remaining

Three positions remain vacant on the Commission:

- Soils engineer
- Mechanical engineer
- Emergency Services

Non-Field Act Compliant Buildings for Public Schools

Passage of AB 16 (Hertzberg), required the SSC to appoint an Advisory Committee to study and report on whether a regulatory process may be developed that will allow the State Architect to determine whether existing buildings can be retrofitted to meet pupil safety performance standards equivalent to buildings constructed in compliance with the Field Act. This issue was especially important in Southern California where the need for additional school facilities is extremely high.

The Advisory Committee reviewed the DSA process, consulted with design professionals and engineering researchers on technical knowledge in the seismic safety of retrofitted buildings, and heard from stakeholders such as school districts and managers on matters regarding legal responsibilities and liabilities. The Committee found that a regulatory process can be developed and included within its report a summary of facts and rationale supporting the findings as well as essential steps required in the process. The report was presented to the Seismic Safety Commission on November 25, 2002. The Commission adopted the report on December 20, 2002 and printed copies were available in January 2003.

Resource Needs of California's Urban Search and Rescue Teams

On September 11, 2002, AB 2002 (Alquist) was signed into law (Chapter 460 Statutes of 2002) establishing the Urban Search and Rescue Emergency Advisory Committee. Guided by the California Seismic Safety Commission and in consultation with the Governor's Office of Emergency Services, the Committee was directed to prepare a strategy plan and make recommendations addressing the resource needs of emergency urban search and rescue teams in California.

After reviewing extensive information, accepting testimony from experts and evaluating on-site demonstration, the Committee, consisting of experienced professionals in the fields of firefighting, law enforcement, and Urban Search and Rescue, developed findings and recommendations to address the resource needs of State and local Urban Search and Rescue (US&R) task forces.

The Committee's findings include:

- It is imperative for public health and safety that trained and equipped local US&R first-responders are available for emergency response throughout the state;
- Local US&R units are vulnerable to local-area disasters (such as earthquakes) and could be compromised in their capabilities to deliver prompt life-saving services;
- Local governments alone cannot shoulder the financial burden of developing and maintaining the needs of local US&R resource teams;
- The benefits of well-maintained and equipped local US&R resource teams extend to regional and State jurisdictions;

- Emergency response equipment being utilized by many local agencies is aging and less effective than newer equipment; and
- Emerging technological advances are continuing to develop emergency response equipment that is more effective and efficient, yet costly to local governments.

The Committee recommended:

- Active and expanded support for the improvement and expansion of local US&R teams;
- Immediate and aggressive pursuit of funding from federal, state and other public or private sources to finance the acquisition of vehicles and equipment, the construction and improvement of training facilities, and the expansion of specialized training;
- Development of a detailed, multi-year master plan and timeline for the acquisition of the vehicles and equipment, the construction and improvement of training facilities, and the expansion of specialized training; and
- Establishment of an US&R Oversight Committee to supervise the State's efforts to carry out these recommendations in a timely, cost-effective and expedited manner.

The Committee formally presented the Report at the September 11, 2003 Seismic Safety Commission meeting in Vallejo. The report was adopted unanimously by the Commission. The Commission dedicated its September 11, 2003 meeting to the victims of the September 11, 2001 attacks. Chairman Stan Moy opened the Seismic Safety Commission meeting with the following dedication, written by Assemblywoman Carol Liu's representative, Donald Manning, Retired Los Angeles Fire Chief:

"This morning, we dedicate this meeting to the memory of all those who lost their lives two years ago today. September 11, 2001 has become symbolic with unfathomable bravery of all associated with the attack on the Pentagon, the Twin Towers of the World Trade Center and United Airlines flight 93 that crashed in Pennsylvania. The members of FDNY, NYPD and the Port Authority Police have clearly shown what bravery means. But bravery was everywhere. On UA flight 93 passengers fought with terrorists, people trapped in the towers and at the Pentagon helped each other at the risk of their own lives. A memory that is vivid for all of us is the firefighters of FDNY going into those Towers that they knew were doomed because they had heard the radio messages and viewed the destruction. People in the towers needed their help and they were going to do their best. The firefighters knew the danger and, as was traditional, they left a goodbye note pinned to the fire truck with their badge.

Following on the heels of this fateful morning were the Urban Search & Rescue personnel from across the United States responding to the scene. They were integrated into the rescue effort with FDNY almost immediately. Urban Search & Rescue personnel demonstrated unfettered bravery as they worked 12 and 24-hour shifts tunneling into the debris searching for survivors. We all watched in awe as bravery became a common sight and a commitment to rededicate ourselves to be better prepared was on everyone's mind.

Before the September 11, 2001 attack on America, we had to look hard for bravery. On that day and those to follow, bravery was all around us. Today this Commission will have the opportunity to participate in helping to have a better-prepared Urban Search & Rescue. America remembers and we remember. Let us have a moment of silence in honor of all those who lost their lives two years ago."

Progress Report: California Earthquake Loss Reduction Plan

The Commission released the revised *California Earthquake Loss Reduction Plan (2002-2006)* in April 2002. The Plan is required by the California Earthquake Hazards Reduction Act (*Government Code, Section 8870, et seq.*). It identifies earthquake risk reduction goals and priorities through 2006 for the State of California and current and proposed efforts, goals, and priorities of the State through 2006.

The *Earthquake Loss Reduction Plan* coordinates the State's mitigation efforts as required by the California Earthquake Hazards Reduction Act of 1986. The *California Earthquake Loss Reduction Plan* is the State's policy statement describing what actions need to be taken to reduce long-term earthquake risk. It serves as the State's *Strategic Plan*, guiding the executive and legislative branches with overall implementation strategies and priorities for seismic safety. It also serves as California's federally required hazard mitigation plan for earthquakes, preserving the State's eligibility to apply for federal disaster relief funds after major earthquakes. Copies are available at the Commission office and on the website <u>www.seismic.ca.gov</u>.

In December 2003, the Commission released the *Progress Report for the Earthquake Loss Reduction Plan.* This new publication represents the first attempt to gauge the progress of all the initiatives contained within the *California Earthquake Loss Reduction Plan, 2002 - 2006.* In addition, the Report presents the results of a limited survey of State funding for seismic hazard mitigation and recovery programs since the 1989 Loma Prieta earthquake.

California has made major financial commitments to reduce earthquake losses since 1989. The Commission's survey reveals that approximately \$19 billion has been spent on earthquake mitigation activities since 1990. This estimate is conservative since not all seismic hazard mitigation and recovery efforts have been reported to the Commission. The Commission approved a draft of the Report in November 2003.

New Earthquake Shaking Potential Map Highlights California's Exposure

A new earthquake shaking potential map of California was unveiled by the Commission at the 2003 Disaster Resistant California Conference in San Jose in April. It shows that the potential danger from future earthquakes varies from one part of California to another, but is not zero anywhere. It also shows that the highest risk levels correlate closely with the most populated parts of the State.

The map identifes communities that face the greatest risk of shaking. That information helps emergency managers focus limited mitigation resources on those communities and aids planners in thinking about how best to help our population recover quickly from the next earthquake. It also serves as a reminder for California residents to practice earthquake preparedness.

The map --- *Earthquake Shaking Potential for California* -- is a joint product of the Governor's Office of Emergency Services, California Seismic Safety Commission, the California Department of Conservation California Geological Survey, and the United States Geological Survey.

There are hundreds of known faults in California. More than 70 percent of the State's population resides within 30 miles of a fault where intense ground shaking could occur in the coming decades. California generally experiences two or three temblors a year large enough to cause moderate damage to structures and many scientists concur that the state is overdue for a major earthquake. Three-quarters of the nation's future earthquake losses are expected to occur in California.

Losses from an individual earthquake can run into the tens of billions of dollars. In general, the larger the magnitude and the closer the quake is to populated areas, the greater are the losses. But the intensity of shaking is also affected by whether towns and cities are built primarily on bedrock or on soft sediments. The shaking levels shown on the new "Earthquake Shaking Potential for California" map include these "soil effects."

In general, old buildings are less earthquake-resistant than new buildings because they were built under less stringent building codes. As scientists learn more about ground shaking hazards, building codes are improved to help structures better withstand future earthquakes. The new earthquake shaking potential map identifies the places where this issue is most critical to the safety of the citizens of California.

Status Report on California's Unreinforced Masonry Building Law

In 1986, the State passed a law requiring local governments in the highest seismic regions of California to inventory Unreinforced Masonry (URM) buildings in their jurisdictions, establish an earthquake loss reduction program, and report progress to the Seismic Safety Commission. Periodically, the Commission surveys local government progress and sends a status report to the Legislature along with recommendations.

The Commission adopted the 2003 Report to the Legislature at the June 12, 2003 Commission meeting. In summary, the level of compliance with this law has been quite high, about two thirds of the 25,500 URM buildings have been retrofitted or demolished. But so far, only about two thirds of the owners have actually reduced their loss potential by retrofitting in accordance with a widely recognized building code or by other means. Significant progress has occurred, yet many URM programs are ineffective in reducing future earthquake losses.

The report summarizes the status of local government and building owner efforts to comply with this law. The Commission continues to recommend mandatory strengthening to local governments as the most effective URM loss reduction program. Voluntary strengthening has not been as effective because current economic incentives are typically not sufficient to create a market-driven willingness to retrofit. The Commission has proposed additional retrofit incentives in its *California Earthquake Loss Reduction Plan.* The Report recommends that state and local governments "encourage economic incentives, such as improved mortgage terms, reduced insurance rates, and positive tax benefits for upgrading buildings." Still, much remains to be done with respect to the URM Law. The Commission is also recommending the Legislature hold a hearing on the inequities resulting from this law.

The Commission voted to conduct the next survey in five years, due to the burden the survey places on local government resources. The next report will be in 2008.

After the October 2002 5.4 magnitude earthquake in San Giuliano Di Puglia, Italy, which killed 27 children in a collapsed private school, the Commission responded to inquiries from members of the Legislature, the public, and concerned parents about the seismic safety requirements for schools in California. From the questions it was clear that broad segments of the population are recognizing that not all schools have been built to the same earthquake resistant standards. Despite the pride Californians take in the safety provided to our children by schools built in accordance with the Field Act, it is clear that different standards apply to private, charter and public schools. The recent initiative to convert existing non-Field Act compliant structures to school buildings (AB 16) has raised even more questions, some of which were addressed by the Commission's earlier report regarding on the conversion of private schools to Field Act equivalent schools. Parents want to know if their children's schools are safe, regardless of whether they are public, private, or chartered.

An Ad Hoc Committee on School Safety has been formed. The Committee's proposed scope of work is to obtain and review the latest version of state and local codes and statutes regarding school design and construction, and to develop a clear understanding of operative codes statutes and enforcement agencies for public, private, and charter schools. The Committee plans to schedule meetings and obtain testimony from representatives from the Division of the State Architect (DSA) and local building departments regarding requirements and enforcement processes for design review, construction, and inspections for new and retrofitted public, private and charter school buildings under their jurisdictions. The Committee will seek to include representatives from Los Angeles Department of Building and Safety, San Francisco Building Department, and representatives from other areas such as Orange County and the Central Valley.

The Committee will compare code requirements, plan check processes, construction quality assurance, and quality control requirements, and include structural, nonstructural and operation issues. The Committee will then prepare a White Paper that will quantify, based on information developed, the relative seismic safety of public, private, and charter schools, and develop recommendations for changes in requirements to provide equivalent seismic safety for all California school children.

Proposed Timelines on Ad Hoc Committee:

- Sept. 17-Oct. 9, 2003– Research period to compile information.
- Oct. 9, 2003 Meeting: Simplify existing information and identify questions for DSA and local jurisdictions.
- November 13, 2003 Invite DSA for a presentation on its enforcement of the Field Act seismic safety requirements on new and existing public school facilities and charter schools under its jurisdiction.
- January 2004 Conduct a meeting in the Los Angeles area to invite local jurisdictions in Southern California for presentations on their enforcement of the Private School Building Safety Act requirements on new and existing private schools under their jurisdiction.
- February 2004 Conduct a meeting in the Bay Area to invite local jurisdictions in Northern California for presentations on their enforcement of the Private School Building Safety Act requirements on new and existing buildings under their jurisdiction.
- February 2004 Finalize the White Paper.
- March 2004 Submit report to the Commission for its approval.

Once the Ad Hoc Committee has completed its work, it will submit the draft report to the Commission for approval. At that time, the Commission may recommend legislation that would ensure California students receive equivalent levels of protection during earthquakes.

The Commission Releases Third Report on the Pacific Earthquake Engineering Research Center

Located in Richmond, California, the Pacific Earthquake Engineering Research Center (PEER) is an important U.S. regional earthquake engineering research institution that's been in existence since 1997. Its overall purpose is to develop and disseminate the current state-of-the-art performance-based earthquake engineering methodology to meet the safety, functionality, and economic needs of owners and society. Existing State law requires the Seismic Safety Commission to periodically report on PEER to the State Legislature and the Governor's Office. Accordingly, the Commission released its Third Report in August 2003, which covers Years Five and Six of the Center. The previous Commission report on PEER was issued in December 2001 for Year Four.

The new Report provides clear and updated information on the PEER Center including its successes and accomplishments, research and education activities and projects, funding issues, consistency with State plans and priorities, challenges still facing the Center, and specific Commission recommendations for the Center. In collaboration with the California Geological Survey (CGS), the Commission is providing the expertise and guidance to the Governor's Office of Emergency Services (OES) for the seismic hazards portion of the State's All Hazards Mitigation Plan. This Plan is required by the Federal Emergency Management Agency (FEMA). When completed, it will include information on known or proposed mitigation procedures for a broad range of hazards. The Commission and CGS submitted their portion of the Plan to OES in November 2003. Approval of the Plan by the FEMA will allow California to satisfy a requirement of FEMA for mitigation funding under the Stafford Act (The Disaster Mitigation Act of 2000).

The Plan is expected to be submitted to FEMA by September 2004.

Cooperation Agreement Between California and Shizuoka Prefecture, Japan

In a September 6, 2003 ceremony at the California State Capitol, the Prefecture of Shizuoka Japan and the State of California signed a Cooperation Agreement that established a formal and sustainable technical and personnel exchange program for emergency management professionals. The Agreement will allow experts from the Governor's Office of Emergency Services and the Seismic Safety Commission to participate in the mutually beneficial exchange and sharing of knowledge on urban search and rescue, earthquake mitigation, and other emergency management practices and processes. The Commission's role with this venture will be to provide active support in furthering the knowledge exchange between Shizuoka and California.

Seismic Safety Commissioner Daniel Shapiro Receives the Distinguished Alfred E. Alquist Award

The California Earthquake Safety Foundation is a non-profit corporation that aims to raise the level of public awareness and commitment to earthquake safety in California. Once a year, the Foundation awards the Alfred E. Alquist Medal to recognize outstanding achievements in basic and applied research, public policy advancement, education, volunteer service, and program management in earthquake safety in California. This year, the Foundation bestowed the distinguished award on the Seismic Safety Commission's own Daniel Shapiro.

Through his personal integrity and professional skills, Daniel Shapiro has served to bridge the gap between professional assessments of seismic safety and public programs. As a result of his leadership in California and at the national level, Daniel Shapiro has helped to create a better understanding of earthquake impacts, and the steps that can be taken to enhance life safety.

Past commission recipients were Karl Steinbrugge, Dr. Lucy Jones, Frannie Winslow, and Lloyd Cluff.

Seismic Safety Commission Receives Western States Seismic Policy Council Award

The Western States Seismic Policy Council (WSSPC) annually recognizes achievement in the areas of earthquake mitigation, preparedness, and response through its Awards in Excellence program. The Council was developed to share model programs throughout the west as well as to recognize the creative and innovative efforts within the earthquake hazards reduction community. In 2003, the Seismic Safety Commission won the "Excellence for Mitigation Efforts" Award for its report, *Improving Natural Gas Safety in Earthquakes*. The award was presented to the Commission at the WSSPC Annual Conference on September 20-24, 2003 in Portland, Oregon. The WSSPC is a non-profit organization whose mission is to help reduce future earthquake losses by providing a forum to advance earthquake programs within the Western Region through information exchange, research application, and education.

Local Outreach for 2003

To better engage local governments in statewide policy development and to provide an opportunity for the Commission to exchange important information with local residents and officials, the Commission visited the local communities of Piedmont, Vallejo, San Diego, Alameda/Oakland, San Jose, Los Angeles, and Sacramento in 2003. Following are some of the Commission's outreach activities for 2003:

The Commission Partners with Governor's Office Of Emergency Services for Disaster Resistant Conference in San Jose, California

The Disaster Resistant California Conference was sponsored by the Governor's Office of Emergency Services, in partnership with the Collaborative for Disaster Mitigation (based at San Jose State University) on April 21-23, 2003. Conference partners included the California Earthquake Authority and the California Seismic Safety Commission. The conference was titled "Disaster Resistant California 2003: Multi-Hazard Mitigation– Innovation, Integration and Implementation."

The Disaster Resistant California conference expanded the concepts set forth by the Federal Emergency Management Agency's Project Impact Program. Similar to the Project Impact program, Disaster Resistant California promotes public/private partnerships in an effort to reduce the vulnerability of individual communities to natural and human-caused disasters. The conference has evolved into a dynamic examination of disaster mitigation, planning, preparedness, response and recovery. It is designed to bring together emergency management professionals, local and state government representatives and private business partners to share ideas, technology and resources for the purpose of mitigating disasters.

Commission Visits Vallejo Community And Inspects Seismic Projects

On September 11, 2003, commissioners, staff, and members of the public participated in a field trip in Vallejo. Participants visited a fire station that was recently-retrofitted with a state-of-the-art seismic warning system. The warning system allows for detection of "P" waves which triggers the doors of the station to open automatically. During the Northridge and Loma Prieta earthquakes, some fire stations were inoperable after the buildings were damaged and station doors were unable to open.

Also provided at the fire station was an exhibit on display showing aboveground portable water delivery system, designed to deliver water flow after earthquakes.

Participants also viewed a joint project between the City of Vallejo and the California Transportation Commission. The project involved creating movable freeway dividers that could accommodate the flow of emergency vehicle traffic after earthquakes on freeways through Vallejo.

Finally, participants viewed the new Al Zampa Memorial Bridge Span and a special screening of the video made of the bridge's construction process.

Commission Visits and Reviews High Tech Center in San Diego

In February 2003, the Commission members visited the new high tech Telecommunications Center for Global Exchange, which was established at San Diego State University. It served as the command center for security for the 2003 Super Bowl. The Center provides new innovation in real time data processing and communications and is ready for use for disaster response in the event of a disaster proving valuable after an major earthquake.

Earthquake Preparedness Seminar Organized For Piedmont Community by Chairman Stan Moy

On May 14, 2003, Seismic Commission Chairman Stan Moy served as moderator at an Earthquake Preparedness Seminar held at the Piedmont Asian American Club. City Council member Nancy McEnroe provided welcoming remarks and emphasized the importance of sharing knowledge among residents. Roseanne Perman, Geologist and Piedmont resident, described local seismic conditions in the area, warning of the high seismic risk on the Hayward/Rogers Creek Fault. 'Preparedness and protecting property for Piedmont' was the topic for earthquake specialist Chuck Thiel. The Commission's Staff Structural Engineer, Mr. Fred Turner, gave the audience a 'quiz' on home earthquake safety which lead to further discussion on property protection and public safety.

Piedmont Fire Chief John Speakman, assisted by Fire Captain McLaren discussed local response and emergency services after earthquakes. Because of the great demand for services after major disasters, they stressed the need for residents to be as self-sufficient as possible for at least 3 - 10 days.

This educational seminar could not have been possible without the efforts of the Piedmont City Council, Piedmont Department of Public Works, the California Seismic Safety Commission and the Piedmont Fire Department for their active planning and participation. Association of Bay Area Governments, Collaborating Agencies Responding to Disaster (CARD) of Alameda County, and the California Office of Emergency Services — all provided valuable information for this evening as well.

Executive Director Addresses Silicon Valley Business Community on Lowering Earthquake Risk

Executive Director Richard McCarthy addressed the MicroElectronics Packaging and Test Engineering Council (MEPTEC) on October 28 in Sunnyvale, California. The purpose of the presentation and group discussion was to focus on incentives that would motivate Silicon Valley businesses to do more about earthquake mitigation. Among the topics discussed were identifying the current barriers to implementing earthquake mitigation actions, and pinpointing what 'acceptable risk'' is for Silicon Valley businesses. One of the Commission's goals is to partner with Silicon Valley businesses to craft legislation that would extend incentives to small businesses which devote resources to lower earthquake risk in California.

Web-Related Activities for 2003

Seismic Safety Commission staff continue to work with San Diego State University in maintaining and updating the Commission's web site. Web related activities for 2003 included posting new Commission publications, and the Earthquake Shaking Potential Map for California.

Current Projects:

- 1 A linking video animation on the 1933 Long Beach earthquake and a three-dimension fly through version of the Earthquake Shaking Potential Map for California.
- 2. Creation of a virtual tour through a split-level house showing examples of furniture movement during earthquakes.
- 3. A video entitled *Written In Stone Earthquake Country Los Angeles*. The Commission has been a partner with the Southern California Earthquake Center and San Diego State University and others in developing a documentary describing the geology of the Los Angeles Basin and its potential for affecting residents and businesses. The video evolution is scheduled to be released in January 2004 for the 10th Anniversary of the Northridge Earthquake.

Dennis Bellet, Chief Structural Engineer, Division of the State Architect (Inventory of K-12 Public Schools – AB 300) Richard Eisner, Office of Emergency Services (Nonstructural Earthquake Hazards in Schools) Brian Tucker, President, GeoHazards International (Applying California's Seismic Safety Methods in Developing Countries) Dr. Pat Abbott, Professor, Department of Geology, San Diego State University (San Diego Seismic Risk Los Angeles Area Outreach) Deborah Steffen, Director San Diego OES (Update on Emergency Management in San Diego County) Paul Jacks, Deputy Director, Governor's Office of Emergency Services (Disaster Resistant California Conference) Lloyd Cluff, Pacific Gas & Electric Company (Designing the Trans Alaska Oil Pipeline System over the Denali Fault) Elaine Bush, CEO, California Earthquake Authority (Briefing on California Earthquake Authority) Frances Edwards Ph.D., CEM, Director of Emergency Preparedness, City of San Jose Research Associate, Mineta Transportation Institute (Lessons Learned from the World Trade Center) Patricia Martel, General Manager, San Francisco Public Utilities Commission (San Francisco Public Utilities Commission Capital Improvement Program Update) Jeff Griffin, FEMA Regional Director Jeff Lusk, Regional Earthquake Specialist (FEMA Regional IX Briefing) Michael Navarro, Chairman, Hospital Building Safety Board (Annual Report) John Martin, Past Chairman, Hospital Building Safety Board (Annual Report) Sue Botelho, Chief of Program, Policy and Operation Support Section, Facilities Development Division, Hospital Building Safety Board (Annual Report) L. Thomas Tobin, Tobin & Associates (Deciding on Acceptable Risk: The Vallejo LNG Proposal) Mayor Anthony Intintoli, Jr. City of Vallejo (Welcome to Vallejo) Doug Mochizuki, Committee Chairman (Urban Search and Rescue Emergency Advisory Committee Report (US&R) Jeff Metzinger, Battalion Chief, Sacramento Metro Fire Department (Urban Search and Rescue Emergency Advisory Committee Report (US&R) Jim Pearson, Captain, San Bernardino County Fire Department Doug Mochizuki, Committee Chairman (Urban Search and Rescue Emergency Advisory Committee Report (US&R) Dr. Jack Moehle, Pacific Earthquake Engineering Research Center (PEER activities) Dr. Guna Selvaduray, San Jose State University (Disaster Resistant Conference, and **Collaborative Projects**)

Commission Budget Summary

	2001/02 Fiscal Year		2002/03 Fiscal Year		2003/04 Fiscal Year	
	Allotment	Positions	Allotment	Positions	Allotment	Positions
Insurance Fund	-	-	-	-	\$884,000	6
(Seismic Safety						
Account)*						
General Fund	\$755,000	8	\$891.000*	8	0	0
	Note: The original allotment before budget reduction was \$917,000	Note: Lost One Associate Government Program Analyst position due to budget cuts		Note: Lost one Staff Service Analyst Position and One Account Clerk II Position due to budget cuts		
Reimbursements	\$235,000	-	\$175,000	-	\$75,000	-
Total	\$990,000	8	\$1,156,000	8	\$959,000	6

*Since its creation in 1975, the Commission has been primarily supported by the State's General Fund. Beginning in 2003-04, however, the Commission's primary funding source changed. The Commission will no longer rely on General Fund support. With the enactment of Chapter 741, Statutes of 2003 (SB 1049), the Commission's operations will instead be funded from fee revenues derived from assessments on property insurance policies.

Effective January 1, 2004, insurance companies in California will be assessed an annual fee (reflecting the volume of property insurance policies underwritten) at a rate calculated to equal, in the aggregate, the Commission's annual operating budget. For 2003-04, to support the Commission's \$884,000 operating budget, the assessment is estimated at \$0.07 per in-force policy. Under the new law, the Department of Insurance collects the assessment revenue and transfers it to a special account for the benefit of the Commission.

The law establishing this new funding mechanism for the Commission has a July 1, 2007 sunset.

DRAFT

State of California Seismic Safety Commission Annual Report for 2003 (2003-2004 Legislative Session)



Publication 2004-01

Table of Contents

Transmittal Letter to Governor Schwarzenegger1
Mission/Vision Statement
Commission Membership2
Seismic Safety Commission Role, Responsibilities, and Ongoing Activities
Seismic Safety Legislative Summary for 2003-2004
Commission Appointments5
Non-Field Act Compliant Buildings for Public Schools
Resource Needs of California's Urban Search and Rescue Teams
Progress Report: California Loss Reduction Plan 8
New Earthquake Shaking Potential Map Highlights California's Exposure
Status Report on California's Unreinforced Masonry Building Law10
Ad Hoc Committee On School Safety in California 11
The Commission Releases Third Report on the Pacific Earthquake Engineering Center
Statewide Mitigation Plan
Cooperation Agreement Between California & Shizuoka Prefecture, Japan13
Seismic Safety Commissioner Daniel Shapiro Receives the Distinguished Alfred E. Alquist Award
Seismic Safety Commission Receives Western States Seismic Policy Council Award
Local Outreach for 200314
Highlighted Presentations Before the Commission in 200217
Budget Summary