



State of California Board for Professional Engineers and Land Surveyors



2010 Sunset Review Report

Prepared for
California Legislature
Senate Committee on Business,
Professions and Economic Development



**CALIFORNIA STATE BOARD FOR
PROFESSIONAL ENGINEERS AND LAND SURVEYORS**

Mike S. Mondugno, P.E.
Electrical Engineer Member
President (2010/2011)

William “Jerry” Silva
Public Member
Vice President (2010/2011)

Kim Blackseth.
Public Member

James W. Foley, Jr., P.E.
Geotechnical Engineer
Member

David Luzuriaga, P.E.
Civil Engineer
Member

Philip Quartararo
Public Member

Ray Satorre
Public Member

Patrick J. Tami, P.L.S.
Professional Land
Surveyor Member

Michael Trujillo
Public Member

William “Paul” Wilburn, P.E.
Mechanical Engineer
Member

Vacant
Structural Engineer
Member

Vacant
Public Member

Vacant
Public Member

Executive Officer of the Board
David E. Brown

Mission Statement

The Mission of the Board for Professional Engineers and Land Surveyors is to safeguard the life, health, property, and welfare of the public by regulating the practices of professional engineering and land surveying. The Board accomplishes its Mission by:

- Licensing qualified individuals as professional engineers and land surveyors.
- Anticipating changes in the engineering and land surveying professions to ensure that the laws and regulations are contemporary, relevant, and responsive.
- Establishing regulations and promoting professional conduct.
- Enforcing laws and regulations.
- Providing information so that the public can make informed decisions regarding utilizing professional engineering and land surveying services.

Vision Statement

The Board for Professional Engineers and Land Surveyors will have a major role in ensuring that Professional Engineers and Land Surveyors provide the highest quality professional services.

- Consumers and licensees will have access to comprehensive information through a wide range of technology and facilities.
- California Professional Engineers and Land Surveyors will possess the knowledge, skills, and abilities enabling them to meet the expectations of clients and consumers.
- The public will have a high degree of confidence in the engineering and land surveying of roads, bridges, buildings, and other facilities and systems.

September 1, 2010

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PART 1

BOARD FOR PROFESSIONAL ENGINEERS, LAND SURVEYORS AND GEOLOGISTS

BACKGROUND INFORMATION AND OVERVIEW OF THE CURRENT REGULATORY PROGRAM

BACKGROUND AND DESCRIPTION OF THE BOARD AND THE REGULATED PROFESSION

History of the Board

The Board of Registration for Civil Engineers was created in 1929 due to the failure of the Saint Francis Dam (Chapter 766, Statutes of 1929). A law was then enacted requiring the registration of civil engineers. When Committee hearings on the bill were held, a difference of opinion developed between proponents of registration by branch and those who favored registration in the category of professional engineer only. Opposition also developed from those engineers who were against the philosophy of licensing in general. The mining engineers strongly objected to any regulation of their activities as did some representatives of the mechanical and electrical engineering groups. Because the principle opposition came from groups who practiced in branches other than civil engineering, the bill was amended to exclude them and require registration of civil engineers only. It was in this form that Assembly Bill 174 was signed by the Governor (Chapter 801, Statutes of 1929). Initially the area of overlap between architecture and engineering was considered relatively unimportant, but as taller and taller buildings were being created it became a source of increasing controversy. To resolve the disputed area of overlap between architecture and structural engineering, a solution was offered creating the title authority of structural engineer. Registered civil engineers who were found to be qualified in structural engineering could use the title structural engineer. Civil engineers sponsored legislation creating the structural engineer title authority (Chapter 254, Statutes of 1931). In 1933, the Board's jurisdiction was expanded to include the licensing of land surveyors.

The technical advances made during the forties, possibly due to World War II, resulted in the registration, by title, of engineers in the branches of chemical, electrical, mechanical, and petroleum engineering. This was done through legislation in 1947. For the next twenty years, there were many influences of varying importance which contributed to the rapid advancement of engineering. The more noteworthy of these influences included the Korean War, the struggle for missile supremacy, and the race for exploration and control of space. Because of the more specialized use of electrical

and mechanical engineering, the law was amended in 1967 to change electrical and mechanical engineering from title act registrations to practice act registrations. Also in 1967, the legislature created the title disciplines of metallurgical and industrial engineering – which the Board opposed. A bill was then passed by the Legislature (Chapter 895, Statutes of 1968) which gave the authority to create new title acts to the Board. That bill also contained a provision that required any group of engineers applying for registration with the Board to first have in place an accredited college program in their respective branch of engineering. This made it very difficult for any new groups to apply for registration.

Several years passed, and the composition of the Board changed. In 1971, legislation was passed repealing the provision relating to the requirement that a discipline be covered by an accredited program. This legislation had the effect of removing a major road-block to the various disciplines seeking to apply to the Board for recognition, and various groups petitioned the Board for registration. In the early seventies, the Board received petitions from persons representing the branches of aerospace, agriculture, air pollution, communication, control system, corrosion, environmental, fire protection, manufacturing, nuclear, quality, safety, and traffic engineering. Hearings were held, and all petitions were approved except for the petitions of air pollution, aerospace, communication, and environmental engineers. In 1976 and 1977, the Board was finally able to adopt formal regulations to implement the engineering disciplines which it had recognized over the proceeding years.

In 1982, the title authority of geotechnical engineer was added to the practice of civil engineering by the Legislature (Chapter 646, Statutes of 1982).

In 1985, Senate Bill 1030 (Chapter 732, Statutes of 1985) was passed by the Legislature with support from this Board. The bill amended Section 6732 of the Business and Professions (B&P) Code to codify the existing engineering disciplines into the Professional Engineers Act, thereby recognizing them by statute rather than by Board Rule. It also repealed Section 6700.1 of the B&P Code which allowed for the establishment of new engineering disciplines by petition to the Board.

In 1999, due to the continually low number of applicants for the three title acts of corrosion, quality, and safety, and based on recommendations by the Sunset Review Committee, these three title act registrations were eliminated. In 2003, NCEES stopped preparing the examination for the title act of manufacturing, so it was eliminated. There are nine remaining title acts licensed by the Board: agricultural, chemical, control systems, fire protection, industrial, metallurgical, nuclear, petroleum, and traffic engineering.

Legislation enacted during the 4th Extraordinary Session of 2009 (ABX4 20) eliminated the Board for Geologists and Geophysicists and transferred all of the duties, powers, purposes, responsibilities, and jurisdiction to regulate the practices of geology and geophysicists to the Board for Professional Engineers and Land Surveyors. The transfer of authority became effective October 23, 2009.

Function of the Board

The Board is charged with safeguarding the life, health, property, and public welfare by regulating the practices of professional engineering, professional land surveying, geology, and geophysics. The Board provides this public service by qualifying and licensing individuals, establishing regulations, enforcing laws and regulations, and providing information so that consumers can make informed decisions.

The regulation of engineers, land surveyors, geologists, and geophysicists protects the public from incompetent, negligent, and unscrupulous individuals who would offer such services without having met any qualifications. The public is assured that licensed engineers, licensed land surveyors, geologists, and geophysicists have met state-approved education, experience, and examination standards established by the Board. Engineers, land surveyors, geologists, and geophysicists make professional judgments, which have major financial, health, safety, and other significant consequences on a daily basis. The highways, bridges, dams, waterways, buildings, and electrical and mechanical systems in buildings are all products of engineering. Consequences of poorly designed bridges or buildings include deaths and injuries as well as financial hardship to the property owner ultimately responsible for damages and reconstruction. Land surveyors help to define property boundaries. A miscalculation in a residential or commercial neighborhood could cause a property owner financial loss if the property is sold with an incorrect boundary. A structure could be located on another individual's property, with concomitant major financial losses and inability to convey title.

The complexity of engineering, land surveying, geology, and geophysics projects necessitate a very high degree of technical skill and knowledge. The vast majority of licensed engineers hold a college degree in engineering. Calculus, physics, material science, and computer programming skills are required; these are knowledge and skills not typically possessed by members of the general public. Land surveyors make decisions based upon interpretation of legal documents and the use of high-tech locating instrumentation, including satellites and computer programming. Geologists perform fault evaluations, ground water investigations, and slope stability analysis. Again, laypersons rarely possess these skills.

Current Composition of the Board

There are thirteen (13) Board member positions on the Board for Professional Engineers and Land Surveyors. All appointments to the Board are for a term of four years, with vacancies filled by appointment for the unexpired term. Each appointment (or re-appointment) after the initial appointment, if the initial appointment fills an unexpired term, is for a four-year term expiring on June 30 of the fourth year following the year in which the previous term expired. Each member may remain on the Board until the appointment of his or her successor or until one year has elapsed after the expiration of the term for which he or she was appointed, whichever occurs first; this is known as the "grace year." No person is allowed to serve as a member of the Board for

more than two consecutive full four-year terms. (Business and Professions Code [B&P] §6712)

There are seven (7) public member positions, appointed as follows: (B&P §§6711 & 6712)

- 5 public members are appointed by the Governor;
- 1 public member is appointed by the Senate Rules Committee; and,
- 1 public member is appointed by the Speaker of the Assembly.

There are six (6) professional member positions, all appointed by the Governor. The six professional member positions represent the branches or disciplines of engineering and land surveying listed below. In addition, one professional member (either engineer or land surveyor) must be from a local public agency and another professional member (also either engineer or land surveyor) must be from a State agency. (B&P §§6711 & 6712)

- Civil Engineer
- Electrical Engineer
- Mechanical Engineer
- Structural Engineer
- Other Professional Engineer (representing one of the other branches or disciplines not already represented)
- Land Surveyor

As of September 1, 2010, there are three vacancies. The vacancies are the Structural Engineer member position; one of the Governor-appointed Public member positions; and the Speaker of the Assembly-appointed Public member position.

The current Board members, the position they are in, their appointment dates, and the expiration dates of the terms (as of August 1, 2010) are listed below:

Board Member	Position	Appointment Date	Expiration Date	Additional Information
Kim Blackseth	Public Member	6/5/2007	6/30/2012	
James W. Foley, Jr.	Other Professional Engineer (Geotechnical)	10/29/1998	6/30/2010	Local agency In grace year (cannot be reappointed)
David Luzuriaga	Civil Engineer	7/15/2008	6/30/2011	
Mike Modugno	Electrical Engineer	12/21/2006	6/30/2013	Board President – FY10/11
Philip Quartararo	Public Member	2/10/2010	6/30/2010	In grace year (can be reappointed)
Ray Satorre	Public Member	7/13/2007	6/30/2011	Senate Rules Appointee

William "Jerry" Silva	Public Member	2/13/2008	6/30/2010	In grace year (can be reappointed) Board Vice President – FY10/11
Michael Trujillo	Public Member	11/13/2007	6/30/2012	
Patrick J. Tami	Land Surveyor	6/9/2006	6/30/2011	
William Paul Wilburn	Mechanical Engineer	10/9/2009	6/30/2012	State agency
VACANT	Structural Engineer		6/30/2013	Position has been vacant since 6/30/10
VACANT	Public Member		6/30/2014	Position has been vacant since 1/10/06
VACANT	Public Member		6/30/2011	Assembly Speaker Appointee Position has been vacant since 6/30/08

Committees of the Board

Prior to 2005 there were four active standing committees of the Board: administration, examination, enforcement, and legislation. Each committee was comprised of Board members (typically five). The Board eliminated the standing committees as a cost saving measure in 2004, and currently all issues are reviewed and discussed at the Board meetings. The Board currently has no plans to reinstate the standing committees.

The Board also has the authority to appoint Technical Advisory Committees (TACs) under the provisions of §6728 and §8715 of the B&P Code. The TACs each consist of five technical members, all of whom are licensees of the Board, but none of whom are Board members. These committees are appointed as needed to advise Board members and staff on matters pertaining to civil engineering, electrical engineering, geotechnical engineering, mechanical engineering, structural engineering, and land surveying. Currently there is an active TAC for structural engineering and one for land surveying. If the Board has technical issues that require review, a TAC in the appropriate branches of engineering would be appointed.

In addition to the above-noted standing committees, the President of the Board, with the concurrence of the other Board members, occasionally appoints special committees to serve specific purposes. The life, charge, and operating procedures of such committees are determined by the establishing authority.

Licensing

The Professional Engineers Act (PE Act) has had some major changes over the years since the Board's creation. The number of branches of engineering, which the Board regulates, has increased, and the status of some of the older branches has changed.

Currently, professional engineers are licensed through three (3) "Practice Act" categories of civil, electrical, and mechanical engineering, and through nine (9) "Title Act" categories of agricultural, chemical, control system, fire protection, industrial, metallurgical, nuclear, petroleum, and traffic engineering. There are also two specialized "Title Authorities" for those already licensed as a civil engineer: structural and geotechnical (soils) engineer. In addition to the engineering branch titles already listed, titles also restricted to licensed engineers are "Consulting Engineer," "Professional Engineer," "Registered Engineer," and "Licensed Engineer."

There is only one category of licensure for land surveyors. They are regulated under the Professional Land Surveyors' Act (PLS Act). Restricted titles for land surveyors are "licensed land surveyor," "professional land surveyor," "land surveyor," "land survey engineer," "survey engineer," "geodetic engineer," "geomatics engineer," "geometronic engineer," "photogrammetrist," and "photogrammetric surveyor," or any combination thereof.

Certification, and the right to use the titles, is also provided to those designated as an "Engineer-In-Training" (EIT) or a "Land-Surveyor-In-Training" (LSIT). An EIT or LSIT will be certified after completing the qualifying experience and passing the required examination. The examinations, which test a person's knowledge of the fundamentals of engineering and surveying, are usually taken and passed prior to applying for licensure as a professional engineer or land surveyor.

Not all engineers who practice in California have to be licensed. There are a number of licensing exemptions for engineers who are employees of licensed engineers or who work for industrial corporations, public utilities, or the federal government. In 1997, the industrial exemption was broadened to include temporary employees, contract employees, and those hired through third-party contracts.

Legislation enacted during the 4th Extraordinary Session of 2009 (ABX4 20) eliminated the Board for Geologists and Geophysicists and transferred all of the duties, powers, purposes, responsibilities, and jurisdiction to regulate the practices of geology and geophysicists to the Board for Professional Engineers and Land Surveyors. The transfer of authority became effective October 23, 2009.

The Geologists and Geophysicists Program is responsible for the licensing of geologists and geophysicists, as well as certifications for the specialty geologist titles of "Certified Engineering Geologist (CEG)" and "Certified Hydrogeologist (CHG)." To receive certification as a CEG or CHG, licensure as a Professional Geologist (PG) is required and must be maintained with the specialty geologist certification.

The titles of Professional Geologist and Professional Geophysicist, and the practices of geology and geophysics, are regulated in California by the Professional Geologist and Geophysicist Act (PGG Act). In addition, the titles of Certified Hydrogeologist and Certified Engineering Geologist are also regulated in California by the PGG Act.

Major Changes to the Board

Several significant legislative changes have occurred since the last sunset review of the Board. They are as follows:

- SB 1549 (Figueroa) (Chapter 691, Statutes of 2004). Reporting of legal action requirements. This legislation created a program where all professional engineers and land surveyors are required to report criminal convictions; civil action judgments, settlements, and arbitration awards; and administrative actions to the Board within 90 days of their occurrence or from when the licensee has knowledge of the action. In addition to this requirement for licensees, liability insurers, California courts, and all self-insured local and state governmental agencies are required to report criminal convictions, civil judgments, settlements, and awards.
- SB 1476 (Figueroa) (Chapter 658, Statutes of 2006). This bill contained language that allows the Board to authorize a selected organization to receive payments directly from applicants for its examination fees. This bill also gave the Board the authority to contract with an outside vendor for the direct collection of national examination fees.
- SB 819 (Negrete McLeod) (Senate Committee on Business, Professions and Economic Development omnibus bill) (Chapter 308, Statutes of 2009). This bill amended an archaic provision of the law for professional engineers and land surveyors that required the Board to approve the examination cut scores before the examination results could be mailed out to the candidates. This process resulted in a delay of up to 8 weeks (until the Board could approve the cut scores at its next scheduled Board meeting) before the results could then be released. The amendments in this bill allow the Board's Executive Officer to approve the scores as soon as the office receives them, thereby enabling the candidates to be licensed in a more timely manner.

Since the last sunset review, the Board has made a number of regulatory changes to the Board Rules (Title 16, California Code of Regulations, Section 400, et seq.). The major changes are as follows:

- Amended Sections 472.1 and 473.1 to increase the maximum amount of the administrative fine which may be ordered from \$2,500 to \$5,000 to conform with statutory changes. (Effective July 9, 2004)
- Amended Sections 404.1 and 404.2 to clarify the responsible charge criteria and definition for professional engineers and professional land surveyors. (Effective September 28, 2005)

- Amended Section 407 to change the renewal fee to \$125 for all licenses that expired on or after October 1, 2005. (Effective September 20, 2005)
- Amended Section 418 to clarify the criteria for rehabilitation that the Board must consider when determining whether to deny issuance of a license and when determining whether to reinstate a revoked license. (Effective August 25, 2005)
- Amended Section 473 to clarify that review by a licensee is required prior to the issuance of a citation in cases involving negligence and/or incompetence. (Effective September 24, 2005)

The Board conducts a biennial strategic planning session to review the accomplishments of the Board during the previous two years and to revise the plan to reflect future goals and objectives. The current strategic plan for 2008-2010 is included as an attachment to this report (see Attachment 1).

In October of 2004, the Board began administering the National Structural II examination in addition to the Board's State Specific Structural Engineering Seismic examination. In 2005, the Board began administering the National Structural Engineering examination and the National Land Surveyor examination twice per year, rather than once per year. The Board determined that administering the examinations twice per year would allow structural engineers and land surveyors to become licensed in a more expeditious manner, thus affording consumers with more choices when hiring a structural engineer or land surveyor.

The Board implemented its reporting of Legal Actions Program, which became operative on January 1, 2008. Under this new program all professional engineers and land surveyors are required to report criminal convictions; civil action judgments, settlements, and arbitration awards; and administrative actions to the Board within 90 days of their occurrence or from when the licensee has knowledge of the actions. In addition to this requirement for licensees, liability insurers, California courts, and all self-insured local and state government agencies are required to report criminal convictions and civil judgments, settlements, and arbitration awards. More information about this program is contained in the Enforcement Program portion of this report.

In April of 2009, after thorough review and input from its Structural Engineering Technical Advisory Committee, the Board adopted the use of the newly-developed 16-hour NCEES Structural Engineering examination for licensing structural engineers in California. This examination will replace the 8-hour National Structural II examination and the 8-hour State Specific Structural Engineering Seismic examination that are currently administered by the Board. Administration of this new national examination will begin in April 2011. This new examination has been developed based on the new International Building Code (IBC), which has been adopted by all states including California. The new examination will thoroughly test the candidates' knowledge of the building code requirements relating to structural engineering including seismicity and structural engineering that is unique to a seismically active state such as California. The use of a national examination will facilitate licensure in California of structural engineers who are licensed in other states. In order to comply with the requirements as

currently stated in Business and Professions Code section 6763.1 that all structural engineer applicants be tested on their “knowledge of state laws, rules, and regulations, and of seismicity and structural engineering unique to the practice in this state,” the Board has begun working with subject matter experts to develop a multiple choice, “take home” examination which will also need to be passed in order to obtain licensure in California as a structural engineer.

Legislation enacted during the 4th Extraordinary Session of 2009 (ABX4 20) eliminated the Board for Geologists and Geophysicists and transferred all of the duties, powers, purposes, responsibilities, and jurisdiction to regulate the practices of geology and geophysicists to the Board for Professional Engineers and Land Surveyors. The transfer of authority became effective October 23, 2009.

Major Studies

Senate Bill 2030 (Figueroa) (Chapter 1006, Statutes of 2000) added Section 6704.1 to the Professional Engineers Act requiring the Department of Consumer Affairs (DCA) to contract with an independent consulting firm to perform a comprehensive analysis of the title acts of the Board. The legislation also required the Board to be responsible for paying for the study. In 2000, the Joint Legislative Sunset Review Committee (JLSRC), the Department of Consumer Affairs (DCA), and the Board contracted with an independent consultant, The California State University Sacramento Institute for Social Research (ISR), to perform a review of all of the title act branches of engineering. The report was completed in November 2002 and concluded that the state should eliminate title protection and offer practice protection to all regulated disciplines. A task force was appointed by the Board consisting of 2 Board members, a Legislative Committee consultant, a representative from DCA, and other various members of the public and engineers. The task force held five meetings and made recommendations to the Board that were adopted in May of 2004. The JLSRC adopted the Board’s recommendations and in June 2005 placed them in a bill, SB 246. SB 246 contained language that established chemical, control systems, fire protection, nuclear, petroleum, and traffic engineering as “practice acts” and discontinued examinations for the title disciplines of agricultural, industrial, and metallurgical engineering (the examination for manufacturing engineering was discontinued in 2003 - SB 364). SB 246 was met with vigorous opposition and did not make it through the Legislature. The Board then worked with the JLSRC to determine the most appropriate method of regulating the practice of engineering. After further study and numerous meetings, it was determined by the Legislature that it would be in the best interest of consumers and licensees to maintain the way the Board currently licenses engineers.

Licensing Data

As of July 1, 2010, there are approximately 88,127 licensed Professional Engineers and Land Surveyors and 31,028 certified Engineers-in-Training and Land Surveyors-in-Training.

Public information regarding licensees and certificate holders provided by the Board in response to inquiries by phone, e-mail or mail include initial license date, expiration date, address of record, and status of the license (clear, delinquent, canceled, retired) including complaint history (pursuant to the Board's complaint disclosed policy). Since In-Training certificates do not expire, the initial issue date of the certificate and address of record is the only public information provided for In-Training certificate holders. In-Training certificates are considered void once the holder obtains the professional license.

LICENSING DATA	FY 2006/07	FY 2007/08	FY 2008/09	FY 2009/10
Total Professional Licenses:"	Total: 86,527	Total: 86,280	Total: 87,141	Total: 88,127
California	63,659	63,360	63,965	64,816
Out of State	22,868	22,920	23,176	23,311
Total In-Training Certifications:	Total: 20,178	Total: 23,543	Total: 27,099	Total: 31,028
California	19,359	22,523	22,523	29,409
Out of State	819	1,020	1,267	1,619
Applications Received	19,214	19,989	21,224	19,960
Applications Denied	Total: 208	Total: 152	Total: 208	Total: 168
PE & PLS	142	137	194	143
EIT & LSIT	66	15	14	25
Licenses Issued	Total:	Total: 7,310	Total: 6,740	Total: 7,291
Professional Licenses	Not Available	3,716	2,809	3,290
Certifications	Not Available	3,594	3,931	4,001
Renewals Issued	44,736	48,041	46,128	47,719
Statement of Issues Filed	Total: 0	Total: 2	Total: 2	Total: 1
Statement of Issues Withdrawn	Total: 0	Total: 1	Total: 0	Total: 1
Licenses Denied	Total: 1	Total: 0	Total: 1	Total: 2

Current Licenses/Certificates

LICENSING DATA	FY 2006/07	FY 2007/08	FY 2008/09	FY 2009/10
Professional Licensees (By Type)	Total: 86,527	Total: 86,280	Total: 87,141	Total: 88,127
Civil	47,943	48,578	49,633	50,497
Geotechnical ¹	1,308	1,317	1,338	1,358
Structura ¹	3,410	3,470	3,529	3,601
Electrical	8,775	8,610	8,790	8,916
Mechanical	14,522	14,538	14,405	14,633
Land Surveyor	3,911	3,952	4,090	4,176
Title Acts				
Agricultural	214	209	202	193
Chemical	2,000	1,971	1,937	1,954
Consulting ²	10	9	9	9
Control System	1,806	1,584	1,517	1,416
Corrosion ²	324	317	292	290
Fire Protection	776	771	759	760
Industrial	644	529	527	467
Manufacturing	910	763	709	640
Metallurgical	300	304	277	277
Nuclear	682	666	627	613
Petroleum	404	405	389	389
Photo Surveyor ²	5	4	4	4
Quality ²	1,122	929	869	796
Safety ²	739	669	616	585
Traffic	1,440	1,472	1,489	512
In-Training Certifications	Total: 20,178	Total: 23,543	Total: 27,099	Total: 31,028
EIT Certificate	18,900	22,028	25,324	28,960
LSIT Certificate	1,278	1,515	1,775	2,068

¹ Not counted in total licenses as they already have Civil License.

² License type eliminated.

New Licenses/Certificates Issued

LICENSING DATA	FY 2006/07	FY 2007/08	FY 2008/09	FY 2009/10
Professional Licenses Issued (By Type)	Total: 1,609¹	Total: 3,716	Total: 2,809	Total: 3,290
Civil	719	1,867	1,560	1,867
Geotechnical	36	40	39	52
Structural	112	95	130	185
Electrical	229	327	368	398
Mechanical	256	351	397	478
Land Surveyor	125	185	167	148
Title Acts				
Agricultural	6	1	1	0
Chemical	23	35	46	71
Consulting ²	0	0	0	0
Control System	14	0	11	11
Corrosion ²	0	0	0	0
Fire Protection	21	25	29	29
Industrial	6	2	4	5
Manufacturing	0	0	0	1
Metallurgical	4	2	6	6
Nuclear	2	1	0	2
Petroleum	3	1	1	4
Photo Surveyor ²	0	0	0	0
Quality ²	0	0	0	0
Safety ²	0	0	0	0
Traffic	53	61	51	33
In-Training Certifications	1515	Total: 3,594	Total: 3,931	Total: 4,001
EIT Certificate	1411	3,332	3,636	3,833
LSIT Certificate	104	262	295	168

¹ The total for FY 2006/07 includes only one examination cycle. All other fiscal years include two examination cycles.

² License type eliminated.

Licenses Renewed

LICENSING DATA	FY 2006/07	FY 2007/08	FY 2008/09	FY 2009/10
Renewals Issued (By Type)	Total: 44,736	Total: 48,041	Total: 46,128	Total: 47,719
Civil	23,203	26,828	24,303	27,120
Geotechnical	569	734	594	746
Structural	1,668	1,816	1,725	1,851
Electrical	5,187	3,719	5,334	3,812
Mechanical	6,936	7,708	7,224	7,395
Land Surveyor	1,936	2,215	1,976	2,231
Title Acts				
Agricultural	113	89	102	79
Chemical	922	1,044	943	1,032
Consulting ¹	2	7	2	7
Control System	943	573	847	499
Corrosion ¹	94	204	88	171
Fire Protection	371	377	385	367
Industrial	403	124	353	116
Manufacturing	455	245	385	203
Metallurgical	90	195	86	174
Nuclear	180	453	173	392
Petroleum	181	222	173	207
Photo Surveyor ¹	1	3	1	4
Quality ¹	523	337	449	273
Safety ¹	253	353	229	307
Traffic	706	795	756	733

¹ License type eliminated.

BUDGET AND STAFF

Current Fee Schedule and Range

The Board relies on its license renewal fees for its main revenue source. License renewals account for 60% of the Board's total revenue. Another 39% in revenue comes from examination application fees. The remaining 1% includes reimbursements, fines/citations, delinquency fees, and other miscellaneous fees. Renewals are paid every two years. A fee increase was effective October 1, 2005, to increase renewal fees from \$100 every 2 years to \$125. The last examination application fee increase was effective July 1, 2003. It increased the professional examination application fees from \$175 to \$275, and the in-training application fees from \$60 to \$100. The Board has no plans to increase either its license renewal or its examination application fees within the next three fiscal years.

Fee Schedule	Current Fee	Statutory Limit
Application & Exam Fee Professional In-Training	\$275 \$100	\$400 \$100
Renewal Fee	\$125 / 2 Years	Not more than professional application fee
Delinquency Fee	\$62.50	Not more than 50% of renewal fee in effect on the date of reinstatement
Exam Appeal Fee	\$134	\$134 Set by regulation, not statute
Duplicate Certificate Fee	\$10	\$10 Set by regulation, not statute

Revenue and Expenditure History

Renewal fee revenue has increased by an average of 30% for each 2-year renewal cycle during the 4-year period from FY 2004/05 to FY 2007/08 with a renewal revenue spike every other fiscal year. This dropped to only a 5% gain from FY 2008/09 to 2009/10. Applications fees, the Board's second major source of revenue, increased by an average of 4% each fiscal year from FY 2005/06 to FY 2009/10. Overall, expenditures grew by 12% in FY 2007/08, by 1% in FY 2008/09, and then dropped 3% in FY 2009/10. Total revenues have exceeded expenditures by an average of \$1.1 million since FY 2005/06, thus enabling the Board to maintain a consistent 6.5 months fund reserve.

REVENUES	ACTUAL				PROJECTED	
	FY 2006/07	FY 2007/08	FY 2008/09	FY 2009/10	FY 2010/11	FY 2011/12
Application, Exam, License	\$3,614,578	\$3,806,916	\$3,970,080	\$3,774,762	\$3,852,000	\$3,906,000
Renewal Fees	\$5,045,082	\$6,265,905	\$5,395,437	\$6,308,453	\$5,425,000	\$6,405,000
Delinquency Fees	\$61,939	\$65,307	\$58,615	\$63,662	\$63,750	\$63,750
Duplicate License/Cert	\$2,580	\$3,380	\$2,640	\$2,790	\$2,800	\$2,800
Fines (Citations)	\$32,744	\$32,300	\$22,450	\$22,150	\$25,000	\$25,000
Interest	\$286,762	\$299,017	\$135,895	\$43,897	\$50,000	\$50,000
Other	\$13,899	\$17,236	\$10,098	\$6,960	\$10,000	\$10,000
TOTAL REVENUE	\$9,057,584	\$10,490,061	\$9,595,215	\$10,222,674	\$9,428,550	\$10,462,550
TOTAL REIMBURSEMENTS	\$60,063	\$52,789	\$28,086	\$24,317	\$25,000	\$25,000
TOTAL RECEIPTS	\$9,117,647	\$10,542,850	\$9,623,301	\$10,246,991	\$9,453,550	\$10,487,550

EXPENDITURES	ACTUAL				PROJECTED	
	FY 2006/07	FY 2007/08	FY 2008/09	FY 2009/10	FY 2010/11	FY 2011/12
Personnel Services	\$2,734,275	\$3,050,805	\$2,996,122	\$2,833,085	\$3,000,000	\$3,036,000
Operating Expenses	\$5,333,420	\$6,006,501	\$6,171,952	\$6,035,875	\$6,500,000	\$6,575,000
(-) Reimbursement	(\$16,000)	(\$16,000)	(\$16,000)	(\$16,000)	(\$16,000)	(\$16,000)
(-) Distributed Costs	\$	\$	\$	\$	\$	\$
TOTALS	\$8,051,695	\$9,041,306	\$9,152,074	\$8,852,960	\$9,484,000	\$9,595,000

Expenditures by Program Component

Examinations:

The number of national and state examinations administered by the Board grew by an average of 5% from FY 2005/06 to FY 2008/09 with a drop of 8% in FY 2009/10. Expense savings for this examination population decrease coupled with changes to the State Geotechnical examination format reduced the Program's expenses for FY 2009-10 by \$354,000 as compared to FY 2008/09. By comparison, the FY 2008/09 Program expenses increased by over \$300,000 for national examination grading fee increases absorbed within the Board's existing budget. The majority of all examinations administered by the Board are provided by a contract with the Board's national association, the National Council of Examiners for Engineers and Surveying (NCEES), that charges a fee for every national examination book used and examination of the examination graded. NCEES increases their fees approximately every 4 years.

In summary, the Examination Program expenses have averaged slightly over \$4.5 million each fiscal year. From FY 2005/06 to FY 2009/10, Program expenses grew by a total of 10% keeping up with an examination population that is still higher (by 1,800 examinees) than previous fiscal years even with the FY 2009/10 decrease. BCP augmentations to fund the Program expense increases are outlined below.

<u>Fiscal Year</u>	<u>BCP Funding:</u>	<u>Positions/Purpose</u>
FY 2004/05	\$ 293,000	National Exam Scoring Fee Increase
FY 2007/08	\$ 39,000	Increase Hourly Rate Paid to Exams Subject Matter Experts
FY 2008/09	\$ 96,000	Senior Land Surveyor Registrar

Enforcement:

Enforcement Program expenses have steadily increased since FY 2006/07 by an average of 3% each fiscal year. Specifically, four enforcement analyst positions were added from FY 2006/07 to FY 2007/08 through the BCP process. The FY 2006/07 BCP added staff to address the caseload backlog of over 600 cases, 50% of which were already over one year old. Two of the positions replaced positions abolished in FY 2001/02 and FY 2002/03 due to hiring freeze requirements for positions vacant over 6 months. At that time, the case backlog was growing at a rate of over 60 cases each fiscal year or by 20%. These positions were funded through a BCP augmentation of \$46,000 and a total \$126,000 redirection of the Board's \$27,000 Postage and \$99,000 Attorney General existing budget funds. The FY 2007/08 BCP added one position to address workload for the new Reporting of Legal Actions Program that requires specified licensee information related to criminal convictions and civil action judgments, settlements, or arbitration award information be reported and maintained effective July 1, 2006. While staff was obtained for growth in enforcement citations that became backlogged, the position was later redirected to the Geology Program for FY 2010/11. For this reason Enforcement expense increases may continue to occur in FY 2010/11 and FY 2011/12 for citations backlogs once the enforcement caseload is minimized.

<u>Fiscal Year</u>	<u>BCP Funding:</u>	<u>Positions/Purpose</u>
FY 2006/07	\$ 126,000	3.0 PY – (Enforcement case backlogs)
FY 2007/08	\$ 96,000	1.0 PY – (SB 1549 (Ch. 691, 2004))
FY 2010/11	\$ 94,000	1.0 PY – (Citation backlogs)

Licensing and Administration:

Both Licensing and Administration have reduced their overall expenditures since FY 2006/07 to accommodate increases in the Examinations and Enforcement Programs.

EXPENDITURES BY PROGRAM COMPONENT	FY 2006/07	FY 2007/08	FY 2008/09	FY 2009/10	Average % Spent by Program
Enforcement	\$1,513,560	\$2,018,742	\$2,044,425	\$2,574,070	23.18%
Examinations	\$4,269,367	\$4,526,621	\$4,894,206	\$4,743,519	52.42%
Licensing	\$759,319	\$833,302	\$739,601	\$550,894	8.20%
Administrative	\$1,525,451	\$1,678,641	\$1,491,612	\$1,000,478	16.20%
TOTALS	\$8,061,697	\$9,057,306	\$9,169,843	\$8,868,961	

Fund Condition

The Board has had an average fund reserve level of 6.5 months since FY 2006/07. The FY 2003/04 and FY 2005/06 fee increases provided a fiscal year revenue flow above fiscal year expenses supporting a consistent, healthy reserve level. The 2-3 % growth in license renewals experienced each fiscal year helped absorb expense increases since FY 2006/07 and is expected to do so through FY 2011/12. Because license renewal revenue provides 60% of the Board's revenue, the growth in the total licensee population renewing each fiscal year is expected to support projected increases for the Examinations and Enforcement Programs.

A comparison of revenues and expenditures from FY 2006/07 to FY 2009/10 shows that total revenues have exceeded expenses by \$91,000 and that the Board's reserve has grown by approximately 1%. No deficit is projected in the near future.

ANALYSIS OF FUND CONDITION		FY 2007/08	FY 2008/09	FY 2009/10 (Budget Yr)	FY 2010/11 (Projected)	FY 2011/12 (Projected)	FY 2012/13 (Projected)
Total Reserves, July 1		\$3,984	\$5,530	\$3,982	\$5,330	\$5,301	\$6,129
Revenue Types	License Renewal Fees	\$6,266	\$5,395	\$6,308	\$5,425	\$6,405	\$5,425
	Exam Application Fees	\$3,807	\$3,970	\$3,775	\$3,852	\$3,906	\$3,906
	Delinquent Fees	\$65	\$59	\$64	\$64	\$64	\$64
	Surplus Money Investment Income	\$299	\$136	\$44	\$50	\$50	\$50
	Other Miscellaneous	\$54	\$35	\$32	\$38	\$38	\$35
Total Revenue		\$10,491	\$9,595	\$10,223	\$9,429	\$10,463	\$9,480
Total Rev. & Transfers		\$14,475	\$15,125	\$14,205	\$14,759	\$15,764	\$15,609
Unreimbursed Loans to General Fund			\$2,000				
Accrued Interest Loans to General Fund*							

Total Resources	\$14,475	\$13,125	\$14,205	\$14,759	\$15,764	\$15,609
Total Expenditures	\$9,011	\$9,143	\$8,875	\$9,466	\$9,643	\$9,859
Reserve, June 30	\$5,464	\$3,982	\$5,330	\$5,293	\$6,121	\$5,750
MONTHS IN RESERVE	7.2	5.2	6.8	6.6	7.5	7.0

NOTE: Dollar amounts reflected in thousands.

* Accrued interest is paid upon receipt of General Fund loan. Loan repayment has not yet occurred.

LICENSURE REQUIREMENTS

Education, Experience, and Examination Requirements

There are three categories of Professional Engineer licensure available in California: (1) practice act, (2) title act, and (3) title authority. The practice acts are civil, electrical, and mechanical engineering. Practice act means that only a person appropriately licensed with the Board may practice or offer to practice these branches of engineering. The title acts are agricultural, chemical, control system, fire protection, industrial, metallurgical, nuclear, petroleum, and traffic engineering. Title act means that only a person licensed by the Board in that branch of engineering may use the title in any manner. The title authorities exist for two sub-branches of civil engineering: structural engineering and geotechnical engineering. A title authority indicates a proficiency in that field greater than what is required for civil engineering licensure and gives the licensee the right to use certain titles. Persons who pass the written examination will be issued a license in the branch of engineering for which they applied. The Board administers exams in 19 distinct topics throughout the year, six of which are unique to the State of California: land surveyor, traffic, special civil seismic principles and engineering surveying, geotechnical, and structural. The remaining examinations are purchased from the NCEES.

There are two ways to qualify for licensure as a Professional Engineer in the State of California:

- The first path is to pass the Engineer-In-Training (EIT) examination, also called the Fundamentals of Engineering (FE) examination. This test is an eight-hour examination covering basic college math, chemistry, physics, and engineering topics. With a passing score on the EIT, the candidate then needs to verify six years of qualifying experience to take the Professional Engineer examination, which is an eight-hour technical examination. Civil engineering candidates have two additional 2-1/2 hour California specific examinations covering seismic principles and engineering surveying. The Board allows educational experience credit towards the six-year total, with appropriate verification. The Board also requires references from a minimum of four engineers licensed or otherwise legally qualified to practice in the discipline in which the applicant is applying. Qualifying work experience can only be gained by working in engineering positions under the responsible charge of a licensed engineer for the discipline to which the candidate is applying. When qualifying work experience is gained outside of the United States, the references for that experience must be from persons authorized to practice engineering in accordance with the laws of the country in which the experience took place. If such references are not licensed engineers, they must provide information that indicates by what authority they are authorized to practice engineering.
- The second path is to waive the EIT by verifying the candidate's engineering degree and 14-17 years of work experience (depending on the accreditation of the engineering degree) and then passing the Professional Engineer examinations.

The structural and geotechnical engineer authorities require additional experience after the candidate receives his or her civil engineer license. The structural candidate must have three years of responsible charge experience in structural engineering, whereas the geotechnical candidate must have four years of responsible charge in geotechnical engineering.

In order to qualify to sit for the Land Surveyor examination, a candidate must submit evidence of one of the following:

- Graduation from a four-year land surveying curriculum with a Bachelor of Science degree or equivalent approved by the Board and two (2) years of actual broad based progressive experience, including one (1) year of responsible field training and one (1) year of responsible office training satisfactory to the Board, and possession of a land surveyor-in-training certificate.
- Graduation from a four-year land surveying curriculum with a Bachelor of Science degree or equivalent NOT approved by the Board and four (4) years of actual broad based progressive experience, including one (1) year of responsible field training and one (1) year of responsible office training satisfactory to the Board, and possession of a land surveyor-in-training certificate.
- At least six (6) years of actual broad-based progressive experience in land surveying including one (1) year of responsible field training and one (1) year of responsible office training satisfactory to the Board, and possession of a professional land surveyor-in-training certificate or engineering-in-training certificate.
- Licensure as a civil engineer with two (2) years of actual broad based progressive experience in land surveying satisfactory to the Board.

Verification of Information Regarding Education and Experience

Applicants for licensure in all categories are required to submit an original, signed application, which includes original transcripts to verify education and original signed and sealed references to verify experience. The applications for licensure require candidates to reveal any criminal history or licensure denial, discipline, suspension, or revocation. Applications are signed under penalty of perjury. If the Board has any doubt as to the validity of the information provided by the applicant, clarification is requested either by mail or phone interview with applicants and references. Board staff will contact the university, past and current employers, and other state licensing boards if necessary.

Passage Rates for All Examinations

Pass rates for all examinations are included in the following tables. Overall, pass rates typically range from 30 to 50 percent. Performance rates of first time examinees versus repeat examinees is analyzed by National Council of Examiners for Engineering and Surveying (NCEES) for the national examinations only and appear to support that performance rates are generally higher for the first time examinees. This analysis is not tracked for state specific examinations.

Examination Passage Rates for National Examinations

The following tables reflect the performance rates of California candidates as they compare to the national average on national examinations. With few exceptions (noted in **bold** in the charts), both first time and repeat California examinees performed at a lower passage rate than the national average. It should be noted that California is the only state that requires six years of qualifying experience for licensure. All other states require a minimum of eight years of qualifying experience.

FE (FUNDAMENTALS OF ENGINEERING)						
YEARS	NATION-WIDE ¹			CALIFORNIA ONLY ¹		
	TOTAL CANDIDATES ₂	FIRST TIME PASSAGE RATE	REPEAT TAKERS PASSAGE RATE	TOTAL CANDIDATES ₂	FIRST TIME PASSAGE RATE	REPEAT TAKERS PASSAGE RATE
FY 2006/07	44090	71.70%	25.85%	6722	63.05%	22.23%
FY 2007/08	47527	71.78%	24.43%	7278	61.67%	20.93%
FY 2008/09	49128	72.43%	28.30%	7681	64.50%	22.75%
FY 2009/10	49766	72.75%	27.50%	7005	64.85%	22.55%

¹ - Statistics provided by NCEES unless otherwise noted.

² - Includes only those candidates that completed the examination and scored by NCEES.

FS (FUNDAMENTALS OF SURVEYING)						
YEARS	NATION-WIDE ¹			CALIFORNIA ONLY ¹		
	TOTAL CANDIDATES ₂	FIRST TIME PASSAGE RATE	REPEAT TAKERS PASSAGE RATE	TOTAL CANDIDATES ₂	FIRST TIME PASSAGE RATE	REPEAT TAKERS PASSAGE RATE
FY 2006/07	2807	63.50%	32.45%	674	44.95%	26.25%
FY 2007/08	2830	59.45%	26.40%	723	43.55%	19.30%
FY 2008/09	2509	66.90%	30.35%	566	50.10%	24.95%
FY 2009/10	1936	66.30%	27.60%	350	52.35%	27.75%

¹ - Statistics provided by NCEES unless otherwise noted.

² - Includes only those candidates that completed the examination and scored by NCEES.

PS (PRINCIPLES OF SURVEYING)						
YEARS	NATION-WIDE ¹			CALIFORNIA ONLY ¹		
	TOTAL CANDIDATES ₂	FIRST TIME PASSAGE RATE	REPEAT TAKERS PASSAGE RATE	TOTAL CANDIDATES ₂	FIRST TIME PASSAGE RATE	REPEAT TAKERS PASSAGE RATE
FY 2006/07	1906	66.25%	27.55%	304	58.30%	26.10%
FY 2007/08	1842	69.45%	40.25%	272	70.25%	44.45%
FY 2008/09	1746	64.15%	30.00%	254	62.40%	24.80%
FY 2009/10	1531	70.60%	37.05%	224	64.95%	41.20%

¹ - Statistics provided by NCEES unless otherwise noted.

² - Includes only those candidates that completed the examination and scored by NCEES.

PE (CIVIL)						
YEARS	NATION-WIDE ¹			CALIFORNIA ONLY ¹		
	TOTAL CANDIDATES ₂	FIRST TIME PASSAGE RATE	REPEAT TAKERS PASSAGE RATE	TOTAL CANDIDATES ₂	FIRST TIME PASSAGE RATE	REPEAT TAKERS PASSAGE RATE
FY 2006/07	14897	65.45%	32.40%	3564	60.60%	24.65%
FY 2007/08	14415	64.70%	30.05%	3658	61.05%	22.85%
FY 2008/09	13367	63.65%	31.75%	3425	59.45%	23.25%
FY 2009/10	16008	62.40%	31.45%	4075	57.40%	25.30%

¹ - Statistics provided by NCEES unless otherwise noted.

² - Includes only those candidates that completed the examination and scored by NCEES.

PE (AGRICULTURAL) †						
YEARS	NATION-WIDE ¹			CALIFORNIA ONLY ¹		
	TOTAL CANDIDATES ₂	FIRST TIME PASSAGE RATE	REPEAT TAKERS PASSAGE RATE	TOTAL CANDIDATES ₂	FIRST TIME PASSAGE RATE	REPEAT TAKERS PASSAGE RATE
FY 2006/07	33	75.00%	44.40%	2	100.00%	0.00%
FY 2007/08	27	72.20%	33.30%	0	0.00%	0.00%
FY 2008/09	32	75.00%	0.00%	4	50.00%	0.00%
FY 2009/10	20	80.00%	0.00%	2	0.00%	0.00%

¹ - Statistics provided by NCEES unless otherwise noted.

² - Includes only those candidates that completed the examination and scored by NCEES.

† - Examination only offered in October each year

PE (CHEMICAL)						
YEARS	NATION-WIDE ¹			CALIFORNIA ONLY ¹		
	TOTAL CANDIDATES ₂	FIRST TIME PASSAGE RATE	REPEAT TAKERS PASSAGE RATE	TOTAL CANDIDATES ₂	FIRST TIME PASSAGE RATE	REPEAT TAKERS PASSAGE RATE
FY 2006/07	510	78.95%	36.75%	48	84.25%	22.50%
FY 2007/08	486	73.50%	22.30%	63	66.70%	13.80%
FY 2008/09	510	76.20%	34.65%	87	68.40%	22.50%
FY 2009/10	511	75.60%	39.60%	85	67.40%	28.40%

¹ - Statistics provided by NCEES unless otherwise noted.

² - Includes only those candidates that completed the examination and scored by NCEES.

PE (CONTROL SYSTEMS) †						
YEARS	NATION-WIDE ¹			CALIFORNIA ONLY ¹		
	TOTAL CANDIDATES ₂	FIRST TIME PASSAGE RATE	REPEAT TAKERS PASSAGE RATE	TOTAL CANDIDATES ₂	FIRST TIME PASSAGE RATE	REPEAT TAKERS PASSAGE RATE
FY 2006/07	159	79.80%	48.90%	15	71.40%	75.00%
FY 2007/08	167	74.20%	55.80%	12	62.50%	50.00%
FY 2008/09	185	72.70%	28.30%	14	60.00%	50.00%
FY 2009/10	202	81.30%	59.60%	15	60.00%	60.00%

¹ - Statistics provided by NCEES unless otherwise noted.

² - Includes only those candidates that completed the examination and scored by NCEES.

† - Examination only offered in October each year

PE (ELECTRICAL)						
YEARS	NATION-WIDE ¹			CALIFORNIA ONLY ¹		
	TOTAL CANDIDATES ₂	FIRST TIME PASSAGE RATE	REPEAT TAKERS PASSAGE RATE	TOTAL CANDIDATES ₂	FIRST TIME PASSAGE RATE	REPEAT TAKERS PASSAGE RATE
FY 2006/07	2579	65.05%	24.75%	442	56.70%	17.55%
FY 2007/08	2639	69.55%	30.55%	492	64.45%	26.70%
FY 2008/09	2721	66.55%	27.25%	549	56.75%	21.20%
FY 2009/10	3054	64.80%	25.10%	553	52.75%	16.65%

¹ - Statistics provided by NCEES unless otherwise noted.

² - Includes only those candidates that completed the examination and scored by NCEES.

PE (FIRE PROTECTION) †						
YEARS	NATION-WIDE ¹			CALIFORNIA ONLY ¹		
	TOTAL CANDIDATES ₂	FIRST TIME PASSAGE RATE	REPEAT TAKERS PASSAGE RATE	TOTAL CANDIDATES ₂	FIRST TIME PASSAGE RATE	REPEAT TAKERS PASSAGE RATE
FY 2006/07	196	42.40%	35.10%	33	43.80%	52.90%
FY 2007/08	190	53.60%	27.40%	41	68.20%	21.10%
FY 2008/09	222	50.80%	31.90%	47	50.00%	19.00%
FY 2009/10	212	63.60%	43.40%	34	66.70%	25.00%

¹ - Statistics provided by NCEES unless otherwise noted.

² - Includes only those candidates that completed the examination and scored by NCEES.

† - Examination only offered in October each year

PE (INDUSTRIAL) †						
YEARS	NATION-WIDE ¹			CALIFORNIA ONLY ¹		
	TOTAL CANDIDATES ₂	FIRST TIME PASSAGE RATE	REPEAT TAKERS PASSAGE RATE	TOTAL CANDIDATES ₂	FIRST TIME PASSAGE RATE	REPEAT TAKERS PASSAGE RATE
FY 2006/07	191	68.80%	39.80%	5	100.00%	0.00%
FY 2007/08	184	68.70%	21.20%	4	66.70%	0.00%
FY 2008/09	120	78.60%	32.00%	7	80.00%	0.00%
FY 2009/10	141	66.70%	21.40%	3	66.70%	0.00%

¹ - Statistics provided by NCEES unless otherwise noted.

² - Includes only those candidates that completed the examination and scored by NCEES.

† - Examination only offered in October each year

PE (MECHANICAL)						
YEARS	NATION-WIDE ¹			CALIFORNIA ONLY ¹		
	TOTAL CANDIDATES ₂	FIRST TIME PASSAGE RATE	REPEAT TAKERS PASSAGE RATE	TOTAL CANDIDATES ₂	FIRST TIME PASSAGE RATE	REPEAT TAKERS PASSAGE RATE
FY 2006/07	3251	66.60%	31.90%	422	66.00%	36.25%
FY 2007/08	3261	65.05%	32.55%	484	64.00%	24.50%
FY 2008/09	3565	70.80%	38.10%	566	71.55%	34.30%
FY 2009/10	3892	68.95%	38.50%	571	68.15%	35.60%

¹ - Statistics provided by NCEES unless otherwise noted.

² - Includes only those candidates that completed the examination and scored by NCEES.

PE (METALLURGICAL) †						
YEARS	NATION-WIDE ¹			CALIFORNIA ONLY ¹		
	TOTAL CANDIDATES ₂	FIRST TIME PASSAGE RATE	REPEAT TAKERS PASSAGE RATE	TOTAL CANDIDATES ₂	FIRST TIME PASSAGE RATE	REPEAT TAKERS PASSAGE RATE
FY 2006/07	42	55.20%	53.80%	8	50.00%	50.00%
FY 2007/08	38	51.90%	45.50%	5	0.00%	50.00%
FY 2008/09	43	55.90%	55.60%	9	60.00%	50.00%
FY 2009/10	44	56.30%	33.30%	12	60.00%	0.00%

¹ - Statistics provided by NCEES unless otherwise noted.

² - Includes only those candidates that completed the examination and scored by NCEES.

† - Examination only offered in October each year

PE (NUCLEAR) †						
YEARS	NATION-WIDE ¹			CALIFORNIA ONLY ¹		
	TOTAL CANDIDATES ₂	FIRST TIME PASSAGE RATE	REPEAT TAKERS PASSAGE RATE	TOTAL CANDIDATES ₂	FIRST TIME PASSAGE RATE	REPEAT TAKERS PASSAGE RATE
FY 2006/07	15	80.00%	80.00%	3	100.00%	50.00%
FY 2007/08	18	73.30%	66.70%	1	100.00%	0.00%
FY 2008/09	23	35.00%	0.00%	5	0.00%	0.00%
FY 2009/10	34	79.30%	80.00%	1	100.00%	0.00%

¹ - Statistics provided by NCEES unless otherwise noted.

² - Includes only those candidates that completed the examination and scored by NCEES.

† - Examination only offered in October each year

PE (PETROLEUM) †						
YEARS	NATION-WIDE ¹			CALIFORNIA ONLY ¹		
	TOTAL CANDIDATES ₂	FIRST TIME PASSAGE RATE	REPEAT TAKERS PASSAGE RATE	TOTAL CANDIDATES ₂	FIRST TIME PASSAGE RATE	REPEAT TAKERS PASSAGE RATE
FY 2006/07	58	93.00%	33.30%	4	100.00%	33.30%
FY 2007/08	67	80.00%	18.20%	5	0.00%	0.00%
FY 2008/09	56	73.20%	46.70%	2	0.00%	50.00%
FY 2009/10	81	82.80%	29.40%	6	75.00%	0.00%

¹ - Statistics provided by NCEES unless otherwise noted.

² - Includes only those candidates that completed the examination and scored by NCEES.

† - Examination only offered in October each year

PE (STRUCTURAL) ‡						
YEARS	NATION-WIDE ¹			CALIFORNIA ONLY ¹		
	TOTAL CANDIDATES ₂	FIRST TIME PASSAGE RATE	REPEAT TAKERS PASSAGE RATE	TOTAL CANDIDATES ₂	FIRST TIME PASSAGE RATE	REPEAT TAKERS PASSAGE RATE
FY 2006/07	766	55.90%	N/A ³	302	48.75%	N/A ³
FY 2007/08	693	58.05%	N/A ³	243	53.90%	N/A ³
FY 2008/09	768	62.00%	N/A ³	297	58.70%	N/A ³
FY 2009/10	927	64.20%	N/A ³	295	47.72%	N/A ³

¹ - Statistics provided by NCEES unless otherwise noted.

² - Includes only those candidates that completed the examination and scored by NCEES.

³ - NCEES does not track repeat passage rate for Structural 2 examination.

‡ - California does not offer the National Structural 1 examination, only the Structural 2.

Examination Passage Rates for State Specific Examinations

The following tables reflect the performance rates of California candidates on the California State Specific examinations. First time and repeat taker data is not differentiated for these examinations. With the exception of the Special Civil examinations (Seismic Principles and Engineering Survey) which are administered twice a year, the remaining state specific examinations are only offered once a year as noted in the respective table.

SPECIAL CIVIL (SEISMIC PRINCIPLES) ¹				
	FY 2006/07	FY 2007/08	FY 2008/09	FY 2009/10
CANDIDATES	3919	4548	4848	4513
PASS %	36.96%	38.08%	38.04%	38.89%

¹ - Statistics provided by BPELS.

SPECIAL CIVIL (ENGINEERING SURVEY) ¹				
	FY 2006/07	FY 2007/08	FY 2008/09	FY 2009/10
CANDIDATES	4245	4806	5147	4507
PASS %	36.40%	38.30	38.35%	37.50%

¹ - Statistics provided by BPELS.

PROFESSIONAL LAND SURVEYOR ¹ †				
	FY 2006/07	FY 2007/08	FY 2008/09	FY 2009/10
CANDIDATES	519	463	447	367
PASS %	34.49%	31.97%	31.32%	23.16%

¹ - Statistics provided by BPELS.

† - Examination only offered in April each year

GEOTECHNICAL ENGINEER ¹ †				
	FY 2006/07	FY 2007/08	FY 2008/09	FY 2009/10
CANDIDATES	86	92	92	84
PASS %	41.86%	42.39%	41.30%	61.90%

¹ - Statistics provided by BPELS.

† - Examination only offered in October each year

TRAFFIC ENGINEER ¹ †				
	FY 2006/07	FY 2007/08	FY 2008/09	FY 2009/10
CANDIDATES	93	102	121	109
PASS %	54.84%	58.82%	40.50%	30.28%

¹ - Statistics provided by BPELS.

† - Examination only offered in October each year

STRUCTURAL ENGINEER ¹ †				
	FY 2006/07	FY 2007/08	FY 2008/09	FY 2009/10
CANDIDATES	310	279	311	351
PASS %	34.52%	29.75%	35.69%	50.43%

¹ - Statistics provided by BPELS.

† - Examination only offered in October each year

Occupational Analysis Performed

The Board initiates an occupational analysis of the regulated licenses on a five to seven year cycle to assess the appropriateness of the legally-mandated requirements for candidates seeking professional licensure. A validation study is completed to identify practice and the critical job activities performed by licensed engineers and licensed land surveyors in California. The purpose of the occupational analysis is to define practice for licensed engineers and land surveyors in terms of the minimal acceptable competence required and actual tasks that candidates must be able to perform at the time they are licensed. Test plans are created as a result of the occupational analyses which serve as the basis for examination development and administration.

The test plan of a licensure examination defines the content of the examination as that content relates to the legally-mandated definitions of practice; it identifies the knowledge, skills, and abilities required for minimally acceptable competence, and it specifies the percentage of the test that should relate to each of these proficiencies. By linking the content to the specification of the test plan and applicable laws and regulations, the job-relatedness of the examination is established.

Test validation experts recommend test plans be updated every five years. In 1993, the Board adopted a schedule that provides funding for a new occupational analysis and test plan for each Board-developed examination on a five to seven year cycle. Examinations purchased from the National Council of Examiners for Engineering and Surveying (NCEES) have had a longer cycle in the past; however, the California Board has requested that this be shortened to 5 years. Wherever possible, NCEES has complied with this request. A schedule detailing the occupational analyses of the Board's examinations, as excerpted from "Section 139(c) Report – August 2010," follows.

State Specific Examinations	Last Analysis	Next Analysis
Geotechnical	2010	2015
Land Surveyor	2002	2010
Special Civil	2005	2011
Structural	2008	2013
Traffic	2009	2014
California Supplemental (CSE)	2010	2015
Professional Geophysicist	2005	TBD

(PGP)		
Certified Engineering Geologist (CEG)	2010	2015
Certified Hydrogeologist (CHG)	2010	2015

National Examinations	Last Analysis	Next Analysis
Fundamentals of Engineering	2003	2013
Fundamentals of Surveying	2003	2012
Chemical	2003	2011
Civil	2008	2013
Electrical	2009	2017
Mechanical	2007	2015
Agricultural	2003	2010
Control System	2002	2012
Fire Protection	2002	2012
Industrial	2003	2012
Metallurgical	2008	2015
Nuclear	2003	2012
Petroleum	2006	2014
Principles of Surveying	2005	2012
Structural (16 Hr.)	N/A	2011
Professional Geologist	2010	TBD

Computer Based Testing

In California, the Board administers fifteen (15) examinations that National Council of Examiners for Engineering and Surveying (NCEES) develops. NCEES began studying the possible implementation of Computer Based Testing (CBT) in 1996. During its recent 2010 Annual Meeting, the CBT Task Force identified the following benefits to the organization, member boards, and potential examinees:

- Enhanced determination of “Minimum Competency”
- Advanced statistical feedback
- Uniform testing experience across state and nation
- Enhanced examinee and site security (consistent examinee identification, elimination of examination book shipping, site sponsored proctors, special accommodations)
- More frequent testing opportunities
- Examinees receiving results quicker
- Comprehensive geographic coverage of testing sites

NCEES directors voted in 2010 to approve CBT Task Force’s recommendation that NCEES prepare and administer the Fundamentals of Engineering (FE) and Fundamentals of Surveying (FS) examinations via computer-based testing at the earliest feasible date. (The FE examination leads to certification as an EIT; the FS examination leads to certification as an LSIT.)

NCEES will continue to research other factors such as examinee references, test offering cycles, examination format models, test publishing, and seat cost fees that will all impact the timeframe for this implementation. Further evaluation of Professional Engineer and Land Survey examinations will commence following implementation of CBT for FE and FS examinations.

The Board is researching evaluating the feasibility of implementing CBT for all nine (9) California specific examinations and will continue to explore the effectiveness of this technology as it matures.

Time Frame for Certification/Licensure by the Board

Unlike boards with on-going testing, this Board currently administers the civil, chemical, electrical, and mechanical engineering, the national land surveyor, and the national structural engineer examinations as well as FE and FS examinations twice a year, on the same date that the examinations are administered nationwide. Agricultural, control system, fire protection, geotechnical, industrial, state land surveyor, metallurgical, nuclear, petroleum, state structural, and traffic examinations are administered once a year, on the same date as all other NCEES examinations are administered nationwide. The time from the final filing date of applications to the examination date is consistent from year to year. The time from an examination date to issuance of license is also consistent from year to year. The length of time depends upon the examination grading process, but is not less than 3 months or more than 4 months.

AVERAGE DAYS TO RECEIVE LICENSE	FY 2006/07	FY 2007/08	FY 2008/09	FY 2009/10
Professional Licenses				
Application to Examination	105	105	105	105
Examination to Issuance	91 – 122	91 – 122	91 – 122	91 – 122
Total Average Days	196 – 227	196 – 227	196 – 227	196 – 227
EIT/LSIT Certification				
Application to Examination	60	60	60	60
Examination to Issuance	91 – 122	91 – 122	91 – 122	91 – 122
Total Average Days	151 – 182	151 – 182	151 – 182	151 – 182

Continuing Education/Competency Requirements

There is no requirement that engineers or land surveyors participate in continuing education as a condition for license renewal, nor does the Board currently plan to pursue any such program. The Board often requires as a condition of disciplinary probation remedial education, including ethics courses, for engineers or land surveyors found to be guilty of violating the PE or PLS Acts, if applicable.

Comity/Reciprocity and Temporary Licensing Process

The Board continues to offer temporary licenses to professional engineers from other states and countries. The statutes limit the professionals granted a temporary license to one project only and for a 180-day time limit. Although all professional engineering disciplines are eligible for temporary licensure, the Board has only received applications from civil engineer applicants. This is due to the state specific examination requirements for all civil engineers in California: the California Seismic Principles and Engineering Surveying examinations. Comity licensing for civil engineers is postponed until the candidate's examination requirements are completed. With the examinations offered twice a year, temporary licensing is a faster path to authorization to work in California than comity licensing for civil engineers. Therefore, all of our temporary applicants are civil engineer applicants. Comity licensing for all other engineering disciplines is available by approval of the Board's Executive Officer on a weekly basis due to the elimination of the Section 6761 of the Professional Engineers Act which previously required Board approval for comity licensure at a Board meeting (typically held every 12-14 weeks).

An engineer or surveyor registered in another state may apply for licensure in California by comity. Comity applicants must submit a complete application including work descriptions, references who can verify the work experience, college transcripts (optional), and verification of successful examination in another state. The complete application must be reviewed and approved by a Staff Engineer or Land Surveyor. In addition, comity applicants must take and pass the California Laws and Board Rules examination, a 25-question multiple-choice examination that is completed at home and returned to the Board office for scoring. California accepts the NCEES eight-hour examinations for the practice act branches of civil, electrical, and mechanical engineering, the title act engineering branches, except for traffic for which there is no national NCEES examination, and the 6-hour examination for land surveying. Civil engineering applicants must also pass the California Seismic Principles and Engineering Surveying examinations, which both are mandated by statute. Land surveying applicants must pass the California State-Specific Professional Land Surveying examination, as required by statute. If the home state has waived the EIT or LSIT examination, the application is evaluated to see if the home state's waiver matches California's waiver requirements; if not, the applicant must pass the EIT or LSIT examination or have 14-17 years of experience. Comity licensing for geotechnical engineers is not available in California as no other states offer geotechnical engineering

examinations or licensing. The geotechnical examination is developed and administered by the California Board. Comity licensing is available for structural engineers that are licensed civil engineers in California as required by statute (6736) and have met all other licensing requirements. Structural engineering applicants must also pass the California structural seismic examination as required by statute (6763.1).

Section 8753 of the Professional Land Surveyors Act, which allowed for temporary licensing of land surveyors, was repealed in Chapter 657, Statutes of 2005.

California statutes do not provide for comity for applicants who are registered in another country. Applicants from foreign countries are required to submit the same application as first time California applicants and pass all required examinations.

ENFORCEMENT PROGRAM

The Enforcement Unit of the Board is responsible not only for the investigation of complaints but also for all inquiries (telephone, e-mail, fax, letter) regarding the complaint investigation process and how to file a complaint; the status of licenses, especially related to previous complaints and disciplinary actions; and the laws and regulations relating to the practices of professional engineering and land surveying. In general, the only inquiries that are not handled by the Enforcement Unit are those that involve the application/examination/licensure process. The inquiries handled by the Enforcement Unit can range from the simple – is a person licensed and have there been any complaints against him – to the complex – does a certain action constitute professional practice. The inquiries come from the licensees and the local agencies, such as Building Departments and County Surveyors' Offices, as well as from the public/consumers. The Enforcement Unit staff is responsible for responding to all inquiries directly or for referring them to the appropriate person (e.g., the Board's staff engineers and land surveyor or legal counsel) and ensuring that a response is provided. Additionally, the Enforcement Unit is also responsible for all enforcement-related legislative and regulatory (rulemaking) proposals, such as requiring licensees to use written contracts through statute and adopting Codes of Professional Conduct regulations. The Enforcement Unit is also responsible for the maintenance of the Board's website.

As of June 30, 2010, The Enforcement Unit was comprised of ten full-time positions and one part-time position – one program manager; eight full-time analyst positions responsible for investigating complaints, responding to inquiries, coordinating the Citation Program, coordinating the Reporting of Legal Actions Program, coordinating the Examination Subversion Program, and handling any enforcement-related rulemaking proposals and publications; one full-time clerical support position; and one part-time Retired Annuitant at the analyst level. The Enforcement Unit will be authorized to add one full-time analyst position when the Fiscal Year 2010/11 Budget is enacted. However, the Enforcement Unit also lost one analyst position through the Fiscal Year 2010/11 Spring Finance Letter (SFL) relating to the Geologists and Geophysicists Program. The SFL included a recommendation that the Geologists and Geophysicists Program be given an additional analyst position; however, since there happened to be a vacancy in the Enforcement Unit at the time, it was decided that the position would be transferred from the Professional Engineers and Land Surveyors Enforcement Unit and Fund to the Geologists and Geophysicists Program and Fund, rather than authorizing a new position for the Geologists and Geophysicists Program.

In FY 2001/02, the Enforcement Unit lost two full-time analyst level positions due to vacancies occurring during the hiring freeze. Concurrent with the loss of these staff positions, the Board began to receive more complaints, thereby increasing the workload of the already over-burdened staff. Because of this increase in workload and decrease in staffing, the Board's complaint investigation cases aged rapidly. The Board's goal is to have fewer than 10% of its pending cases over one year old. At the end of FY 2000/01, there were 323 complaint investigation cases pending with 35% over one

year old. By the end of FY 2005/06, there were 648 complaint investigation cases pending with 50% over one year old. In FY 2006/07, the Enforcement Unit was authorized to add two full-time analyst and one full-time clerical positions to deal with the backlog of cases. The Enforcement Unit has successfully reduced, although not completely eliminated, its backlog of complaint investigation cases. At the end of FY 2009/10, there were 298 complaint investigation cases pending with 34% over one year old. The Enforcement Unit is continuing to focus on reducing the backlog of aged complaint investigation cases.

The complaints received by the Board are often complex due to the technical nature of the engineering and land surveying professions. The Enforcement Unit must obtain evidence from all of the parties involved and then secure the services of an independent technical expert to review all of the evidence and provide an opinion as to whether or not the subject has violated the laws in his or her professional practice. Technical experts are licensees of the Board who are independently employed and who assist the Enforcement Unit in reviewing the technical aspects of cases. Since the technical experts are independently employed, there are often times when their own workload does not allow them to work on the Board's cases. The Enforcement Unit maintains a pool of technical experts from which it selects the most appropriate expert for a case, based on the nature of the work involved as well as the location of the project. There are times when the Enforcement Unit has difficulty finding a technical expert who has the specific expertise and knowledge required for a case as well as the time to review the case. This also contributes to the aging of the complaint investigation cases.

Another factor that contributed to the backlog of enforcement complaint cases is the effect that the budget crisis and hiring freeze had on the Division of Investigation (DOI). DOI assists the Enforcement Unit staff with the investigation of some of the Board's complaint cases, especially those involving allegations of unlicensed practice. DOI also investigates cases on behalf of other boards and bureaus with the Department of Consumer Affairs. DOI prioritizes its investigations by giving the highest priority, and immediate attention, to those cases in which there is an immediate threat to the public health, safety, and welfare. There is generally not an immediate threat to the public health, safety, and welfare with engineering and land surveying cases; therefore, DOI does not give this Board's cases the highest priority. Although this Board refers only a small portion of its complaint cases to DOI, the inability of DOI to timely investigate its cases contributed to the overall aging of the Board's complaint investigation cases.

Although the Enforcement Unit has been successful in reducing the backlog of complaint investigation cases, the unfortunate side effect of this was to create backlogs of cases awaiting the issuance of a citation or referral to the Office of the Attorney General. In order to reduce the backlog of cases awaiting referral to the Office of the Attorney General, the duties of one Enforcement Analyst position were changed to handle fewer complaint investigation cases and handle more of the preparation of cases for submittal to the Office of the Attorney General. Therefore, the Enforcement Unit has been able to submit more cases to the Office of the Attorney General for formal disciplinary action against licensees, which has reduced the backlog of cases

submitted. In FY 2006/07, only 15 cases were submitted; in FY 2009/10, 88 cases were submitted. The majority of the Board's administrative disciplinary (accusation) cases are resolved through settlement, rather than proceeding to hearing. At this time, the Board does not have any major concerns with the handling of its cases by the Office of the Attorney General; the cases are either processed in a timely manner or there are valid reasons for the delays.

Unfortunately, the Citation Program has not fared as well.

The Board may issue administrative citations to both licensed and unlicensed individuals. The citations may contain an order of abatement or an order to pay an administrative fine to the Board in the maximum amount of \$5,000 per violation or both. Citations may be issued to unlicensed individuals when the investigation reveals that the unlicensed person violated the Professional Engineers Act or Professional Land Surveyors' Act. Although unlicensed activity may be charged as a criminal misdemeanor through the District Attorney's Office, most District Attorneys are unwilling to expend their limited resources on crimes which they view as minor and which can be handled administratively. By issuing a citation, the Board can put the unlicensed individual on notice as to what actions constitute a violation of the laws, as well as providing public notice to other individuals. Citations are also issued to licensees who have violated the laws but are not deemed to be a threat to the health and safety of the general public. For example, many of the land surveying complaints investigated by the Enforcement Unit involve the failure of the licensee to file a Record of Survey or a Corner Record with the County Surveyor's Office in the time and manner required by law. A citation can be issued to the licensee containing an order of abatement ordering him or her to file the required record; by issuing the citation ordering the licensee to comply with the law, the Board is ensuring that the public is protected by the maintenance of the public records of lands. The issuance of a citation also gives the Board the authority to enforce compliance from the licensee, because a failure to comply with a citation order can lead to further – and more serious – disciplinary action against the licensee. Prior to the implementation of the Citation Program, minor violations of law were handled by the issuance of a letter from the Enforcement Unit advising the licensee that continued violations could result in disciplinary action taken against the license. The Board's issuance of the citation serves as a reminder to the licensee and other licensees that he or she must follow the laws and regulations under which he or she is granted licensure and that there are professional and monetary consequences if he or she does not.

Citations become final 30 days after issuance unless they are appealed. The cited person may appeal the citation by requesting an informal conference with the Board's Executive Officer or a formal administrative hearing in front of an Administrative Law Judge or both. Following the informal conference, the Executive Officer may dismiss, modify, or affirm the citation. If the citation is dismissed, it is considered final immediately upon issuance of the dismissal. If the citation is modified or affirmed, then it becomes final 30 days after issuance of the modification or affirmation, unless the cited person has already requested a formal administrative hearing or does so upon

receipt of the modification or affirmation. A fine is not considered assessed until the citation becomes final. If a fine is assessed, it becomes due 30 days after the citation becomes final. The Board will extend the time in which the payment must be made and allow the cited person to make payments if so requested.

Prior to FY 2008/09, one analyst handled the entire Citation Program, in addition to handling complaint investigation cases, and the initial establishment of the Reporting of Legal Actions Program. In addition to reviewing the case file and preparing the citation order for the signature of the Executive Officer, the analyst who serves as the Citation Program Coordinator is also responsible for serving the citation and following up once the citation is served. The analyst is responsible for coordinating the informal conferences, preparing and serving the decisions following the informal conferences, and preparing the case for submittal to the Office of the Attorney General in the event the cited person requests a formal appeal hearing. In addition, the analyst is also responsible for ensuring that compliance with the final citation orders is achieved. It was determined that this workload assignment was contributing to the backlog of cases awaiting issuance of a citation. Therefore, the duties were re-assigned so that one analyst was assigned to the Citation Program on a full-time basis and another analyst on a part-time basis. Because of the backlog, the Board was able to justify an additional position through the Budget Change Proposal (BCP) process; this position is included in the FY 2010/11 budget.

On average, 40% of the citations issued are appealed, either through the request for an informal conference, a formal appeal hearing, or both. Because so many of the citations are appealed, which delays the process, the Citation Program has not been the swift enforcement tool that it was hoped it would be initially. However, it is still a very useful tool in the overall enforcement process.

Another impact to the workload of the Enforcement Unit has been the addition of the Reporting of Legal Actions Program. As part of the Board's Sunset Review in 2003, it was determined that language should be added to the Professional Engineers Act and the Professional Land Surveyors' Act to require licensees, insurance providers, and the courts to report criminal convictions and civil settlements, judgments, or arbitration awards over \$50,000 to the Board. Legislation was enacted which added Article 4.5, Sections 6770 through 6770.6, to the Professional Engineers Act and Article 5.7, Sections 8776 through 8776.7, to the Professional Land Surveyors' Act. However, this legislation included a provision that the Reporting of Legal Actions Program would not become operational until the Board was given sufficient funding and granted hiring authority to implement the program. The Board was given this funding and authority in FY 2007/08. Therefore, the program became operational on January 1, 2008. The Enforcement Unit receives reports of criminal convictions from licensees and of civil actions from both licensees and insurance providers; very few reports are received from the courts. Upon receipt of a report, the Enforcement Unit initiates an investigation to determine if the licensee has violated the laws and whether disciplinary action should be pursued against the license. The Enforcement Unit understands that civil lawsuits are often settled by licensees or their insurers as a "cost of doing business" without any

admission of guilt or liability. The Reporting of Legal Actions Program is viewed by the Board as another tool by which it may learn of licensees who pose a danger to the public health, safety, welfare, and property, just as if it received a complaint from a consumer. The Enforcement Unit fully investigates all cases; it does not take disciplinary action based solely on the receipt of a report of a civil action.

In FY2005/06, the Board expanded its examination subversion program. Examination subversion is any action before, during, or after a licensing examination which may affect the outcome and validity of the examination and which may give an examinee an unfair advantage over other examinees. While the most egregious form of examination subversion is obtaining, distributing, and using secured examination problems before, during, and after the examination, other forms of examination subversion include examinees colluding with each to complete the examination, one examinee copying from another examinee, and an examinee attempting to gain an advantage by using more time to complete the examination than is allowed. Prior to FY2005/06, the Board removed examinees from examination sites if they were observed committing any acts constituting examination subversion as defined in Business and Professions Code section 123 and Title 16, California Code of Regulations section 442. The examinees would have their examinations voided, and they would not be allowed to sit for a future examination until they advised the Board in writing that they understood and would comply with the laws and rules regarding examination subversion and security. Beginning in FY2005/06, the National Council of Examiners for Engineering and Surveying (NCEES), the organization which develops and grades the majority of the examinations the Board administers, developed a computer program which performs analyses of the responses given on the examinations and can identify pairs of examinees who show a statistical probability of having colluded on the examination. NCEES notifies the Board of the results of these collusion analyses, and the Enforcement Unit conducts investigations of the identified examinees, just as it does with those examinees who are removed from the examination sites.

In the last year, various staff from the Enforcement Unit have participated in several activities with the Department of Consumer Affairs. Two staff members were on the Enforcement Best Practices Committee, which researched and development recommendations and the "best practices" that are followed by other states and other State agencies in their investigation and enforcement programs. Another staff member attended the Department's inaugural Enforcement Academy, an 8-week, 8-session program designed to provide a solid, standard baseline of knowledge and practices for new and existing employees who perform enforcement functions. The Enforcement Program Manager has also participated in the development of legislative language that could be used by the Department and the non-healing arts boards and bureaus as part of the Consumer Protection Enforcement Initiative (CPEI) and is currently serving on a committee with other enforcement managers and DOI staff to assist DOI in the development of procedures and standards to ensure that cases are processed by DOI in the most efficient and effective manner. The Enforcement Unit also provides monthly reports to the Department regarding the progress it is making in reducing its backlogs.

Along with these duties, the Enforcement Unit has also traditionally handled the updating and maintenance of the Board's internet website. The Enforcement Program Manager currently serves as the webmaster. More information about the Board's website is provided in the section entitled "CONSUMER OUTREACH, EDUCATION, AND USE OF THE INTERNET."

In FY2009/10, the Enforcement Unit prepared and distributed an updated *Guide to Engineering and Land Surveying for City and County Officials*. This guide contains information for City and County agencies, such as building departments and County Surveyors' Offices, regarding the practices of professional engineering and land surveying. The guide is designed to answer frequently asked questions that local agency officials have when dealing with professional engineers and land surveyors, as well as with what unlicensed individuals are allowed to do. The last time the publication was prepared and distributed was in 1998; many laws had changed since then, so the publication was completely updated. In addition, the Enforcement Unit also developed a training manual for its independent Technical Experts to provide clear information regarding their role in the complaint investigation process.

The Board does not require local agencies or its licensees to report suspected violations of the laws. However, the Board encourages all individuals who have evidence that violations may have occurred to submit that information to the Enforcement Unit for review and investigation. The Enforcement Unit accepts complaints from all sources, including anonymous submittals.

Statistical Overview of Enforcement Program

ENFORCEMENT DATA	FY 2006/2007	FY 2007/08	FY 2008/09	FY 2009/10
Complaints Opened	559	457	458	456
Complaints Opened (by Source)				
Public (consumer)	158	152	157	179
Profession/Licensees	62	64	90	81
Government/Law Enforcement	24	42	41	22
Other/Internal	324	194	169	186
Complaints Opened (By Type) ¹				
Unlicensed Activity	98	103	108	82
Competence/Negligence	114	105	159	124
Contractual	87	84	78	60
Fraud	56	49	53	41
Record of Survey	29	23	74	55
Examination Subversion	271	149	94	167
Code of Professional Conduct	9	16	10	8
Reporting of Legal Actions Program (07/08)	N/A	1	18	38
Other	8	28	24	20
Complaints Pending	637	482	382	298
Complaints at the Division of Investigation (DOI) (subset of Complaints Pending)	100	92	62	29
Complaints Closed	569	612	558	541
Complaint Closed by Category				
No Violation/Insufficient Evidence	171	135	130	150
Compliance Obtained/Resolved	209	191	129	109
Cease & Desist/Warning Letter	34	76	91	59
Mediated	7	9	11	2
Citation to be Issued ²	70	113	112	98
Referred for Criminal Action ³	12	11 ⁶	9	5
Referred to AG's Office ⁴	12	63 ⁶	77	103
Other ⁵	18	12	5	14
Final Citations	9	48	37	17
Accusation Cases				
Submitted to AG's Office ⁴	15	17	59	88
Accusations Filed	11	7	28	74
Accusations Withdrawn after Filing	3	0	0	1
Accusations Dismissed	0	1	0	0
Disciplinary Decisions (by type)				
Default Decisions	1	2	0	3
Stipulated Settlements	16	2	6	22
Proposed Decisions (PD)	4	3	4	5
Decision After Non-Adoption/Reduced PD	0	0	0	0
Decision After Reconsideration	0	0	0	0
Disciplinary Orders				
License Revocation/Surrender	10	2	4	11
Revocation/Stayed with Probation	8	1	5	11
Suspension/Stayed with Probation	0	0	0	0
Probation extended with conditions	2	1	1	0
Public Repeval with conditions	1	1	0	7
Accusation withdrawn; Citation issued	0	1	0	1

(See annotations on next page)

Enforcement Data Table Annotations:

It is rare that a complaint will be opened, submitted to DOI, closed, have a citation issued or an accusation filed, and have disciplinary action taken all in the same fiscal year.

1. Complaints can be opened under more than one "type"; therefore, adding up the various types under "Complaints Opened (By Type)" will result in an erroneous "total."
2. "Citation to be Issued" indicates the number of complaint investigation cases referred for the issuance of a citation. Multiple cases against the same person may be combined into one citation.
3. "Referred for Criminal Action" indicates those complaints submitted to the District Attorney's Office for the filing of criminal charges; it does not indicate whether or not the District Attorney actually filed charges.
4. "Referred to AG's Office" indicates the number of complaint investigation cases referred for submittal to the Attorney General's Office for the filing of an Accusation. "Submitted to the AG's Office" indicates the number of number of cases submitted to the AG's Office for either the filing of an Accusation or a Petition to Revoke Probation; the term "Accusations" as used in this section also includes Petitions to Revoke Probation. Multiple complaint investigation cases against the same individual are combined into one Accusation case when submitted to the AG's Office; therefore, the number of complaint investigations cases shown as "referred to the AG's Office" will not always equal the number of Accusation cases "submitted to the AG's Office."
5. The Complaint Closing Category "Other" includes such things as non-cooperation of complainant, subject deceased, unable to locate subject, etc.
6. In FY 2007/08, two cases were submitted to both the District Attorney's Office and the Office of the Attorney General. Ultimately, the District Attorney declined to file criminal charges; the Board proceeded with administrative disciplinary action against the licensee through the Office of the Attorney General.

Case Aging Statistical Data

AGING OF PENDING COMPLAINT INVESTIGATION CASES (includes time at DOI and expert, if applicable)				
	FY 2006/07	FY 2007/08	FY 2008/09	FY 2009/10
1-30 days	71	63	21	52
31-60 days	45	36	31	19
61-90 days	20	36	63	23
91-120 days	20	16	11	14
121-180 days	41	42	32	32
181-270 days	40	37	39	34
271-365 days	47	39	34	24
Over 365 days	353	213	151	100
TOTAL PENDING CASES	637	482	382	298
PERCENT OVER 180 DAYS	69%	60%	59%	54%
PERCENT OVER 365 DAYS	55%	44%	40%	34%

AVERAGE AGE OF PENDING COMPLAINT INVESTIGATION CASES (includes time at DOI and expert, if applicable)				
	FY 2006/2007	FY 2007/08	FY 2008/09	FY 2009/10
AVERAGE AGE OF PENDING CASES IN DAYS	513	446	405	321

INVESTIGATIONS CLOSED WITHIN:	FY 2006/07	FY 2007/08	FY 2008/09	FY 2009/10	AVERAGE % OF CASES CLOSED
90 Days	258	170	149	180	33%
180 Days	47	100	133	89	16%
1 Year	52	60	105	111	14%
2 Years	82	106	79	85	15%
3 Years	65	86	56	31	10%
Over 3 Years	65	90	36	45	10%
Total Cases Closed	569	612	558	541	

AGING OF CASES AT THE ATTORNEY GENERAL'S OFFICE									
Pre- and Post-Accusation Filing*	FY 2006/2007		FY 2007/08		FY 2008/09		FY2009/10		
	Pre	Post	Pre	Post	Pre	Post	Pre	Post	
0-91 days	4	3	10	2	18	5	10	26	
92-182 days	0	2	2	3	9	5	22	13	
183-274 days	0	0	1	1	1	6	7	8	
275-365 days	0	2	0	0	11	3	8	7	
1-2 years	0	0	0	1	2	2	1	6	
2-3 years	0	0	0	0	0	0	0	0	
Over 3 years	0	0	0	0	0	0	0	0	

* Pre-Accusation reflects cases in which an Accusation has not yet been filed. Post-Accusation reflects cases in which the Accusation has been filed. Pre-Accusation is calculated from the date the case is submitted to the AG's Office to June 30; Post-Accusation is calculated from the date the Accusation is filed to June 30.

Citations Program Statistical Data

Citations	FY 2006/07	FY 2007/08	FY 2008/09	FY 2009/10
Citations Issued	9	71	60	38
Requests for Appeal	2	29	35	15
Final Citations	9	48	37	17
Amount of Fines Assessed	\$11,250	\$89,600	\$43,350	\$38,750

Citations become final 30 days after issuance unless they are appealed. The cited person may appeal the citation by requesting an informal conference with the Board's Executive Officer or a formal administrative hearing in front of an Administrative Law Judge or both. On average, 40% of the citations issued are appealed. Following the informal conference, the Executive Officer may dismiss, modify, or affirm the citation. If the citation is dismissed, it is considered final immediately upon issuance of the dismissal. If the citation is modified or affirmed, then it becomes final 30 days after issuance of the modification or affirmation, unless the cited person has already requested a formal administrative hearing or does so upon receipt of the modification or affirmation. A fine is not considered assessed until the citation becomes final. If a fine is assessed, it becomes due 30 days after the citation becomes final. The Board will extend the time in which the payment must be made and allow the cited person to make payments if so requested.

As of June 30, 2010, there was an outstanding balance of \$138,600 due to the Board. The main reason for the high outstanding balance is that when a fine is assessed against an unlicensed person, the Board has little recourse to collect the fines. In many cases, the Board is unable to locate the unlicensed person to pursue collection. In addition, the Board is not able to obtain the Social Security number of unlicensed individuals; therefore, it cannot use the Franchise Tax Board refund intercept program to collect the fines due. Most licensees pay the fines because failure to do so could result in their not being able to renew their licenses or in formal disciplinary action being taken against their licenses for failure to comply with the citation orders. It is not cost effective for the Board to seek recovery through the civil courts or a collection agency. If the Department of Consumer Affairs were given the authority to contract with a collection agency on behalf of all boards and bureaus, then the Board would be very interested in participating in this program.

Enforcement Budget and Cost Recovery Efforts

The Enforcement Budget/Expenditures include the Office of the Attorney General [AG], the Office of Administrative Hearings (OAH) and Court Reporters (for hearings conducted by OAH) [OAH/Court Reporters], Evidence/Witness (technical experts on all cases, not just those that are referred to the AG's Office) [E/W], and Division of Investigation [DOI] line items.

Enforcement Budget and Expenditures	FY2006/07	FY2007/08	FY2008/09	FY2009/10
Budget	\$726,311	\$858,448	\$992,476	\$998,163
AG	\$470,675	\$470,675	\$470,675	\$508,188
OAH/Court Reporters	\$96,885	\$105,691	\$108,726	\$112,611
E/W	\$50,363	\$72,341	\$74,418	\$77,077
DOI	\$108,388	\$209,741	\$338,657	\$300,287
Expenditures	\$494,322	\$610,345	\$784,298	\$1,127,333
AG	\$185,746	\$145,537	\$200,277	\$523,543
OAH/Court Reporters	\$39,113	\$25,963	\$22,137	\$51,695
E/W	\$177,608	\$262,780	\$259,606	\$278,183
DOI	\$91,855	\$176,065	\$302,278	\$273,912
Remainder/<Overexpenditure>	\$231,989	\$248,103	\$208,178	<\$129,170>
AG	\$284,929	\$325,138	\$270,398	<\$15,355>
OAH/Court Reporters	\$57,772	\$79,728	\$86,589	\$60,916
E/W	<\$127,245>	<\$190,439>	<\$185,188>	<\$201,106>
DOI	\$16,533	\$33,676	\$36,379	\$26,375

The Board has found that it is much more successful in obtaining full recovery of the costs ordered if the respondents/probationers are allowed to make payments to the Board during the period of probation, rather than requiring them to make one payment shortly after the decision becomes effective. If the reimbursement of the costs is ordered as a condition of probation, which it is in the majority of cases, the only recourse the Board has if the respondent/probationer fails to pay is to terminate the probation and either suspend or revoke the license. If the Board does that, then it cannot collect any of the costs. Therefore, while it may take longer for the Board to receive reimbursement of its costs by allowing the respondents/probationers to make payments, the Board is more successful in obtaining nearly the full amount of cost recovery ordered.

COST RECOVERY DATA	FY2006/07	FY2007/08	FY2008/09	FY2009/10
Total Number of Decisions ¹	21	7	10	30
Number of Decisions Ordering Costs	7	1	4	18
Amount Ordered	\$37,306.50	\$2,639.25	\$27,525.75	\$85,731.34
Amount Collected ²	\$25,905	\$2,639.25	\$2,291.00	0

1 "Total Number of Decisions" represents the total number of decisions issued by the Board during the fiscal year. Cost recovery is not ordered in Default Decisions or when the Accusation is dismissed. Additionally, the Board usually waives recovery of its costs when accepting the voluntary surrender of the license.

2 If reimbursement of the Board's investigative and enforcement costs is ordered as a condition of probation, the subject is given a period of time in which to pay or is allowed to make payments. However, if the subject fails to pay in the time required, it is considered a violation of the probationary order. If the Board orders the probation terminated, all of the conditions including the order to pay reimbursement are also terminated. In some cases, rather than terminate the probationary order, the Board will allow the subject additional time to pay. Additionally, if reimbursement is ordered in a decision which orders the revocation of the subject's license, the reimbursement must be paid only if the license is reinstated. The difference between the amount ordered and the amount collected can be explained as follows:

FY 06/07 \$1,660.50 probation violated, condition terminated; \$2,500 due if license reinstated; remainder due during probation (allowed to make payments)

FY 07/08 paid in full

FY 08/09 \$4,716 due if license reinstated; remainder due during probation (allowed to make payments)

FY 09/10 due during probation (allowed to make payments)

Restitution Provided To Consumers

Pursuant to Government Code Section 11519(b), the Board may order a licensee to pay restitution as a condition of probation. Restitution may not be ordered in a disciplinary decision that does not include probation, unless it is agreed to in a stipulated settlement. Additionally, restitution cannot be ordered through an administrative citation.

RESTITUTION DATA	FY 2006/07	FY 2007/08	FY 2008/09	FY 2009/10
Amount Ordered	\$16,000	0	0	0
Amount Paid	0	N/A	N/A	N/A

The \$16,000 was ordered in a stipulated settlement; the respondent/probationer was given several years to pay the full amount.

Results of Complainant Survey

Since 1993, the Board has sent a Complaint Survey to the complainant whenever a complaint investigation case is closed, along with a self-addressed, prepaid postage envelope. The survey is sent with the letter notifying the complainant of the results of the investigation and that the case has been closed. A survey is not sent if there is no named complainant (such as anonymous complaints). If the survey response includes questions or negative comments, the complainant is contacted to clarify concerns and/or answer any questions. However, there will always be some consumers who do not understand the limits of the Board's jurisdiction and authority and will never be satisfied with the responses they receive from the Board if the outcome of the investigation is not what they wanted. For the Fiscal Years 2006/07 through 2009/10, the Board sent out 1,249 surveys but received only 77 responses for a 6% response rate.

2006/07 – 2009/10 CONSUMER SATISFACTION SURVEY RESULTS				
QUESTIONS	Percentage of Positive Responses			
	2006/07	2007/08	2008/09	2009/10
1 Was our representative courteous?	92%	95%	84%	85%
2 Did our representative understand your problem?	79%	89%	63%	77%
3 Was the complaint process explained to you?	92%	95%	84%	69%
4 Were you kept advised of the status of your complaint?	83%	89%	95%	77%
5 Were the reasons for case closure explained to you in a clear and concise manner?	83%	84%	68%	69%
6 Were you satisfied with the results?	71%	68%	63%	38%
7 Even if the matter was not resolved in your favor, do you feel that your case was dealt with in a fair and reasonable manner?	79%	74%	63%	62%

The following are samples of the comments, both negative and positive, received on the Complaint Surveys:

“We find it unbelievable that you did nothing to discipline [the subject].”

“Under the circumstances, I believe the complaint was handled as best it could be. It was a long time waiting for a decision, but I understand, given the entities involved. [The Board's Enforcement Analyst] was very courteous and professional. Thank you.”

“You did not understand the complaint and pursued your investigation inappropriately.”

“I just provided a copy of the newspaper article regarding the [criminal conviction] and results. Also thank you for following up on this issue.”

“Other ‘details’ (drawings provided by [the subject]) that were used to obtain [city] permits that had gross errors (2 inches) were not addressed in conclusions drawn by board. It is/was not just the survey but accurate calculations.”

“Had a good, positive experience.”

“All I ever got in this case was monthly letters stating ‘still in progress.’ Is this progress – no phone calls. Never called.”

“Great job. We appreciate the monthly updates on status. We are satisfied with the resolution.”

“How would you feel if someone takes \$4,000 from you and doesn’t do the job and still asking for more money.”

“[The Board’s Enforcement Analyst] has handled my complaint in a very professional and efficient manner. I have filed several complaints, and he has been very prompt and precise in all aspects of his job.”

“Not entirely [satisfied with the results]. It took over one year to resolve this case? Why so long?”

“[The Board’s Enforcement Analyst] was wonderful. He made sure he understood the problem/issue, explained everything clearly, and kept us updated – even when he wasn’t going to be in the office, he let me know that – and when to expect to hear from him. I very much appreciate all of his work on resolving this issue for us.”

“I would have liked the issue resolved to my favor. However, I am not dissatisfied with the way in which my case was handled.”

Complaint Disclosure Policy

The Board's Policy on Disclosure of Complaints and Disciplinary Actions was formally adopted by the Board in July 1994. Prior to formally adopting a disclosure policy, the Board had an informal policy that followed the same guidelines and principles that were then expressed in the formal policy adopted in 1994. The Board reviews its disclosure policy and updates it as needed. The Board last updated its disclosure policy in September 2002.

It is the policy of the Board to provide information to the public regarding complaints and disciplinary actions resulting from violations of the Professional Engineers Act, the Professional Land Surveyors' Act, and the Regulations of the Board. The Board keeps records of complaint investigation cases that do not result in citations or formal disciplinary actions for five years. The Board discloses the following information upon request after the completion of an investigation: the number of complaints against the individual; the date the complaint was received; and the disposition of the complaint, such as compliance obtained, mediated/resolved, referred for formal legal and/or disciplinary action, or any other action taken against the subject. If the complaint is still in the investigation stage or if the investigation reveals that there was no violation of the law, no information is disclosed. The Board keeps records of citations and formal disciplinary actions (accusations and decisions) and discloses the information as required by law. The information provided includes the action taken, the reasons for the action, and the date of the action. If the matter is final, information regarding compliance with the order is also provided. If the citation or decision on the accusation is not yet final, its procedural status is provided. The Board also publicizes its enforcement actions by publishing articles in the Board's newsletter, posting the information on the Board's Internet site, and providing information to other states' regulatory boards.

Beginning in FY2010/11, the Board will be posting filed Accusations and final administrative disciplinary decisions on its website as a way to provide further information regarding its enforcement actions to the public.

The Board's disclosure policy is included as an attachment to this report (see Attachment 2).

CONSUMER OUTREACH, EDUCATION, AND USE OF THE INTERNET

Outreach Programs

The Board conducts outreach presentations to local agencies, professional societies/associations, the private sector, consumers, and college/high school students throughout the state. The purpose of this program is to provide information and educate professionals, students, and consumers in the application of the Professional Engineers Act, the Professional Land Surveyors' Act, and engineering and land surveying professions.

The Enforcement Outreach Program includes Board staff attending consumer fairs sponsored by the Department of Consumer Affairs and meeting with other governmental agencies and consumer advocacy agencies in an effort to keep the public informed of the laws and rules related to the practice of professional engineering and professional land surveying. In addition, at the request of professional societies and local governmental agencies, Board staff will attend meetings to discuss any changes in the Professional Engineers or the Professional Land Surveyors' Act, and other topics related to the Board. These outreach meetings also serve to keep the lines of communication open between the Board and local governmental agencies, licensees, and professional associations.

The College Outreach Program provides information regarding career development, initial licensing and examination requirements to college students and professors. Board staff attend college outreach meetings at many California campuses. In addition, staff has participated in high school career day activities promoting the engineering and land surveying professions.

Board Website Information

The Board maintains its own website at <http://www.pels.ca.gov>. The website contains a vast amount of information for consumers, licensees, and applicants.

General information available on the Board's website that is of interest to consumers, licensees, and applicants includes the Professional Engineers Act, the Professional Land Surveyors' Act, and the Board Rules; the Board's newsletter; notices of Board and Committee meetings; Board meeting minutes; and notices of rulemaking proposals. The website also contains information about how to contact the Board, with several different dedicated e-mail addresses set up for specific questions – such as enforcement issues, license verification requests, and application requests.

Consumers can learn about hiring an engineer or land surveyor by reading the Board's Consumer Guide. They can also check on the license status of the person(s) they are considering hiring using the online license lookup feature. The license lookup feature

provides information on the Board's licensees including their license numbers, expiration dates, and addresses of record. The license lookup feature also provides links to any disciplinary actions taken against the licensee. Consumers can also find out how to file a complaint with the Board regarding engineering and surveying problems and can obtain a complaint form to file such a complaint.

Licensees can obtain information about any new laws that affect them and their practices. Many licensees use the online license lookup feature to verify that the Board has their correct addresses of record; they can then use the Address Change Affidavit form on the website to notify the Board if they need to change their addresses of record.

The applications for licensure as a Professional Engineer (all disciplines), Structural Engineer, Geotechnical Engineer, and Professional Land Surveyor are all available on the Board's website, along with extensive information regarding the application/licensure requirements and how to complete the applications. The website also provides extensive information regarding the licensing examinations, including reference lists and test plans for specific examinations, examination location information, the schedule for releasing examination results, and the pass/fail rate statistics for the examinations given over the last five years. Since the majority of the Board's licensing examinations are national examinations, it is not possible to offer them online. The Board does make available the California Laws and Board Rules examination (also called the "Take Home Examination") on its website; this helps speed up the licensure process because staff can now refer applicants to the website to obtain this examination, rather than mailing it out to the applicants.

The Board receives many of its inquiries via e-mail and, if possible, responds via the same manner, thus decreasing the amount of time it takes to respond to inquiries, as well as helping to keep the Board's postage expenses down.

Unfortunately, due to the current budgetary constraints, the Board is not able to employ a full-time Webmaster to update, maintain, and expand its website. One of the Enforcement Unit staff has been assigned to maintain the website to ensure that the information available is current. However, with limited staff time available to work on the website, the Board is not able to expand the content of its website.

Online "Practice" Issues

In recent years, the Board's Enforcement Unit has been called upon to investigate the way in which professional engineers and land surveyors are advertising their services via the Internet. In general, under the Professional Engineers Act, the Professional Land Surveyors' Act, and the Board Rules, internet advertising is no different than advertising in paper publications, such as magazines or telephone directories. If a professional engineering or land surveying company has a website through which they are offering their professional services, then they must meet all of the same requirements as any other professional engineering or land surveying company that

offers services in California. The Board has required companies to make modifications to their websites to ensure that they are in compliance with California's laws, such as clarifying what services they are allowed to perform in California.

PART 2

BOARD FOR PROFESSIONAL ENGINEERS, LAND SURVEYORS AND GEOLOGISTS

GEOLOGISTS AND GEOPHYSICISTS PROGRAM

BACKGROUND INFORMATION AND OVERVIEW OF THE CURRENT REGULATORY PROGRAM

BACKGROUND AND DESCRIPTION OF THE PROGRAM AND PROFESSION

Background of the Geologists and Geophysicists Program:

The Board for Geologists and Geophysicists (BGG) was created in 1969 by legislation under the Geologist Act and was provided authority to regulate the practice of geology. The Board was comprised of seven members (four public members and three professional licensees). In 1972, legislation was adopted to include the practice of geophysics, resulting in the renaming of the enabling act to the Geologist and Geophysicist Act. Professional Geologists had been licensed by the Board since 1970, as had the certification of Engineering Geologists. Professional Geophysicists began being licensed in 1973. Regulations were adopted in 1995 to include Hydrogeologists as a certification to the Professional Geologist License.

Consumer demand for regulation of geological practices and concern for public safety and protection of landslide damage was a driving factor in the establishment of a Board for Geologists. Housing tracts built on hillsides were developed without the benefit of regulated and licensed geologists. In 1962, Southern California experienced a geologic disaster due to rainfall-induced landslides that impacted hillside development. The landslides resulted in significant financial losses that eventually led to the adoption of professional licensure for geologists in California.

In an attempt to prevent future geologic accidents, the City of Los Angeles adopted grading ordinances that required geologic reports for hillside development. Soon afterward, other Southern California cities and counties enacted their own geological ordinances and qualifications for geologists. A need was recognized to establish both uniform statewide standards and a mechanism for statewide licensure. The Board for Geologists and Geophysicists functioned as a separate Board for 40 years.

Legislation enacted during the 4th Extraordinary Session of 2009 (ABx4 20) eliminated the Board for Geologists and Geophysicists and transferred all of the duties, powers,

purposes, responsibilities, and jurisdiction to regulate the practices of geology and geophysics to the Board for Professional Engineers and Land Surveyors (BPELS). The transfer of authority became effective October 23, 2009. The Geologist and Geophysicist Act (Business and Professions Code section 7800, et seq.) and the Rules and Regulations pertaining to the practices of geology and geophysics (Title 16, California Code of Regulations section 3000, et seq.) remain in effect. The practices of geology and geophysics are still regulated. Individuals must still obtain licensure and practice in accordance with the laws and professional standards relating to geology and geophysics. The only change is that the Board for Professional Engineers and Land Surveyors is now enforcing these laws under the Geologists and Geophysicists Program (Program).

Function of the Program

The Geologists and Geophysicists Program is charged with assisting the Board for Professional Engineers and Land Surveyors in safeguarding the life, health, property, and public welfare by regulating the practices of geology and geophysics. The Program provides this service by qualifying and licensing individuals, establishing regulations, enforcing laws and regulations, and providing information so that consumers can make informed decisions.

These functions and duties were performed under the former Board for Professional Geologists and Geophysicists by a staff of five (5) analyst and clerical positions, two (2) seasonal workers, an Executive Officer, and a Senior Geologist Registrar. When the duties and responsibilities were transferred to the Board for Professional Engineers and Land Surveyors, only two staff positions were transferred. Through a Spring Finance Letter, two additional staff positions were given to the Program, pending the passing of the FY2010/2011 budget. Furthermore, one (1) Associate Governmental Program Analyst (AGPA) was transferred from the BPELS fund. This will continue to leave the Program with a staff shortage that may cause delays in the services provided to the public and to licensees.

Current Composition of the Board

As previously stated, legislation enacted during the 4th Extraordinary Session of 2009 (ABx4 20) eliminated the Board for Geologists and Geophysicists and transferred all of the duties, powers, purposes, responsibilities, and jurisdiction to regulate the practices of geology and geophysics to the Board for Professional Engineers and Land Surveyors (Board). The transfer of authority became effective October 23, 2009.

The Board has 13 positions, 7 Public Members and 6 Professional Members. At this time, there are 3 vacancies on the Board.

BOARD MEMBER	APPOINTED BY	POSITION	TERM EXPIRATION
Mike S. Modugno	Governor	Electrical Engineer	6/30/2013
Wm. "Jerry" Silva	Governor	Public Member	6/30/2010
Kim Blackseth	Governor	Public Member	6/30/2012
James W. Foley	Governor	Geotechnical Engineer	6/30/2010
David Luzuriaga	Governor	Civil Engineer	6/30/2011
Philip Quartararo	Governor	Public Member	6/30/2010
Ray Satorre	Senate Rules	Public Member	6/30/2011
Patrick J. Tami	Governor	Prof. Land Surveyor	6/30/2011
Michael Trujillo	Governor	Public Member	6/30/2012
Wm. "Paul" Wilburn	Governor	Mechanical Engineer	6/30/2012
Vacant	Governor	Structural Engineer	6/30/2013
Vacant	Governor	Public Member	6/30/2010
Vacant	Assembly	Public Member	6/30/2011

Committees of the Program

The Board has recently created a Technical Advisory Committee comprised of five licensed geologists who have been appointed by the Board to advise Board members and staff on technical matters pertaining to the practices of geology and geophysics in California. Committee members are paid a per diem of \$100 per day plus expenses. The Technical Advisory Committee provides suggestions and recommendations to the Board regarding matters of professional interest and concern. The Technical Advisory Committee also advises staff on enforcement trends and suggests methods to curtail unlicensed activity.

Practice Act Versus Title Act

The practices of Professional Geology and Professional Geophysics, and the titles of Professional Geologist and Professional Geophysicist, are restricted to those licensed as such in California, pursuant to the Geologist and Geophysicist Act (Business and Professions Code Sections 7830 and 7832). The Act also restricts the titles of Certified Hydrogeologist and Certified Engineering Geologist in California, which are specialty certifications (titles) maintained along with Professional Geologist licenses. Those certified as a Certified Engineering Geologist and/or a Certified Hydrogeologist must maintain current licensure as a Professional Geologist as long as their specialty geology certifications remain active. The Program also provides certification as a Geologist-in-Training (GIT) upon completion of the National Association of State Boards of Geology (ASBOG) Fundamentals of Geology exam. The title of Geologist-in-Training (GIT) is also protected under the Geologist and Geophysicist Act.

Changes Since the Last Sunset Review

The most substantive change was the elimination of the Board for Geologists and Geophysicists (BGG) by the legislature. Although the BGG no longer exists, its duties and responsibilities have transferred to the Board for Professional Engineers and Land Surveyors (BPELS) to regulate the practices of geology and geophysics in California. The laws and regulations of the Geologist and Geophysicist Act remain in effect.

When the responsibility of the former Board for Geologists and Geophysicists was transferred to the Board for Professional Engineers and Land Surveyors (BPELS), only two staff positions were given to BPELS (out of nine (9) previously authorized positions) to continue the administration and enforcement of the Geologist and Geophysicist Act. Although the lack of sufficient staffing has impacted the efficiency of the performance of its duties, the Program continues to license, enforce, and administer the professions according to the Geologist and Geophysicist Act under the authority of the Board for Professional Engineers and Land Surveyors.

Legislative changes that took effect on January 1, 2008 enabled the BGG to increase its renewal fees. Business and Professions Code Section 7847 was amended to state that the cost of the Professional Geologist examination and Fundamentals of Geology examination will be fixed at an amount equal to the actual cost to purchase a national geologist examination and a supplemental California specific examination to a maximum of \$450 (increased from \$300). Renewal fees for both the Professional Geologist and Professional Geophysicist licenses were increased from \$200 to \$270, while the renewal fee for a specialty geologist (Certified Engineering Geologist or Certified Hydrogeologist) was increased from \$50 to \$67.50.

Licensing Data

LICENSING DATA FOR PROFESSIONAL GEOLOGIST	FY 2006/07	FY 2007/08	FY 2008/09	FY 2009/10
Total Licensees	4,952	5,061	4,952	5,065
Applications Received	677	227	331	407
Applications Denied	N/A	N/A	N/A	72
Licenses Issued	100	177	120	83
Renewals Issued	2,442	2,439	2,577	2,408
LICENSING DATA FOR PROFESSIONAL GEOPHYSICIST	FY 2006/07	FY 2007/08	FY 2008/09	FY 2009/10
Total Licensees	223	218	223	198
Applications Received	N/A	N/A	0	8
Applications Denied	N/A	N/A	N/A	4
Licenses Issued	6	3	0	0
Renewals Issued	108	104	102	94
DATA FOR CERTIFIED ENGINEERING GEOLOGIST	FY 2006/07	FY 2007/08	FY 2008/09	FY 2009/10
Total Certifications	1,589	1,608	1,589	1,064
Applications Received	N/A	N/A	41	58
Certifications Issued	15	35	23	8
Renewals Issued	771	815	825	799

DATA FOR CERTIFIED HYDROGEOLOGISTS	FY 2006/07	FY 2007/08	FY 2008/09	FY 2009/10
Total Certifications	838	854	838	869
Applications Received	N/A	N/A	24	43
Certifications Issued	8	12	15	5
Renewals Issued	438	401	464	393

* Notes

The data shown is a result of data kept by the former Board for Geologists and Geophysicists and cannot be verified for accuracy.

BUDGET AND STAFF

Current Fee Schedule and Range

Since the BPELS and the Program keep separate fund accounts, the Program relies on its license renewal fees to provide the majority of its revenue at 69% of total revenue received each fiscal year. Prior to FY 2006-07, exams applications and testing fees comprised 30% of total revenue received. This dropped to 23% from FY 2007/2008 to FY 2009/2010. The remaining 1% includes reimbursements, fines/citations, delinquency fees and other miscellaneous fees. Renewals are paid every two years.

The last fee increases were:

- October 2008 – National Practice of Geology Exam Fee from \$125 to \$150.
- January 1, 2008 – Geologist and Geophysicist renewal fee from \$200 to \$270
- January 1, 2008 – Engineering Geologist and Hydrogeologist renewal fee from \$50 to \$67.50.

The Board plans to amend the regulations by FY 2011/2012 to increase its exam fees to equal the actual cost to the Program for purchase of the exams as required by law.

Fee Schedule	Current Fee	Statutory Limit
Application Fee	\$250	\$250
Exam Fee	\$100-\$250	\$100-\$450
Original License Fee	\$33.75-\$270	\$400
Renewal Fee	\$67.50-\$270	\$100-\$400

Exam	Current Fee	Actual Cost
Practice of Geology examination (PG)	\$150	\$250
Fundamentals of Geology examination (FG)	\$150	\$150
California Supplemental Component (CSC)	\$100	\$100
Professional Geophysicist examination (PGp)	\$100	\$100
Certified Engineering Geologist examination (CEG)	\$100	\$100
Certified Hydrogeologist examination (CHG)	\$100	\$100

License renewal fees are \$270 and paid on a biennial cycle according to the birth year of the license holder. Certification renewal fees are \$67.50 and paid on a biennial cycle according to the birth year of the certificate holder.

The original license fee is based on the license renewal fee and is charged at either a full two-year term or at a one-year term, depending on the birth year of the license holder and the year he or she successfully passed the licensing examinations.

Revenue and Expenditure History

Renewal fee revenue increased by \$50,000 for the combined 2-year renewal period of FY 2008/2009 to FY 2009/2010 as a result of the biennial renewal fee increases effective January 1, 2008. Renewal revenue spikes slightly every other fiscal year. Licensing Application fees, the Program's second major source of revenue, dropped in FY 2008/2009 and FY 2009/2010. This decline began in FY 2006/2007. No drop occurred in FY 2007/2008. The most significant area of decline for licensing applications was the Professional Geologist discipline that has dropped by over 50% since FY 2007/2008. This discipline also provides the majority of all exams applicants. The Professional Geophysicist applications have also dropped significantly. The October 2010 examinations will have only two (2) Professional Geophysicist examinees. The Program's total expenditures have exceeded revenues by approximately 18% since FY 2008/2009.

REVENUES	ACTUAL				PROJECTED	
	FY 2006/07	FY 2007/08	FY 2008/09	FY 2009/10	FY 2010/11	FY 2011/12
Licensing Fees	\$233,460	\$321,372	\$220,515	\$186,294	\$183,000	\$183,000
Renewal Fees	\$782,397	\$737,578	\$810,634	\$758,439	\$820,000	\$784,000
Delinquency Fees	\$26,685	\$13,461	\$12,011	\$14,450	\$14,000	\$14,000
Dup. Lic. / Cert.	\$186	\$66	\$132	\$258	\$260	\$260
Fines & Penalties	\$12,800	\$11,000	\$750	\$1,000	\$4,000	N/A
Other	\$251	\$876	\$795	\$480	\$500	\$500
Interest	\$47,068	\$43,315	\$22,083	\$5,365	\$5,000	\$5,000
TOTALS	\$1,102,847	\$1,127,668	1,066,920	\$966,286	\$1,026,760	\$986,760

EXPENDITURES	ACTUAL				PROJECTED	
	FY 2006/07	FY 2007/08	FY 2008/09	FY 2009/10	FY 2010/11	FY 2011/12
Personnel Services	\$451,041	\$574,297	\$552,848	\$309,977	\$360,000	\$370,000
Operating Expenses	\$505,461	\$616,608	\$679,798	\$759,646	\$900,000	\$900,000
Tort Payments	N/A	N/A	\$30,000	N/A	N/A	N/A
(-) Reimbursement	N/A	N/A	N/A	N/A	N/A	N/A
(-) Distributed Costs	N/A	N/A	N/A	N/A	N/A	N/A
TOTALS	\$956,502	\$1,190,905	\$1,262,646	\$1,069,623	\$1,260,000	\$1,270,000

Expenditure by Program Component

Expenditures were reduced by \$300,000 in FY 2009-10 as a result of ABX4 20 (2009). Effective on October 23, 2009, ABX4 20 abolished the BGG with its responsibilities/workload and 2.0 staff positions transferred to the Board for Professional Engineers and Land Surveyors.

The Exam Program expenses grew significantly in FY 2007/2008 and FY 2008/2009 for national exam fee increases that occurred in each of these fiscal years also absorbed within the former BGG's existing budget. The licensing examination for the Professional Geophysicist license is not cost effective because a state-specific examination must be developed for less than 3 applicants each fiscal year while the cost for the exam development and testing is approximately \$49,000 each year. This includes the cost of examination development, subject matter experts, material costs, and administrative costs.

The Enforcement Program expenses increased significantly in FY 2007/2008 by over \$100,000 but declined back down to less than \$40,000 in FY 2009/2010. The expense increase was due to the former BGG's decision to review previous examination and application processes and change its policy to take enforcement action on those who served as references for applicants and who supplied inaccurate information to the former BGG. This resulted in an increase in complaint cases, temporary enforcement staff, and increased enforcement costs. Licensing and Administration expenses increased slightly in FYs 2008/2009 and FYs 2009/2010 due to the former BGG's decision to increase exams from once each year to twice each year. This resulted in increased fiscal year workload to both administer exams and issue licenses more often.

EXPENDITURES BY PROGRAM COMPONENT	FY 2006/07	FY 2007/08	FY 2008/09	FY 2009/10	Average % Spent by Program
Enforcement	\$347,153	\$509,035	\$356,490	\$254,940	33
Examination	\$316,537	\$504,027	\$654,294	\$527,398	45
Licensing	\$72,858	\$44,219	\$86,559	\$107,516	7
Administrative	\$219,923	\$133,626	\$135,304	\$179,770	15
TOTALS	\$956,471	\$1,190,907	\$1,232,647	\$1,069,624	

Fund Condition

- The Program had an average fund reserve level of 9 months since FY 2006/2007 that is projected to drop to a one month reserve in FY 2011/2012 due to declining exam application revenues. Exams application fees have dropped mostly as a result of the decline in applications for Professional Geologist and Professional Geophysicists.
- A comparison of total revenues to expenditures shows that total expenses exceeded revenues by \$2,000 in FY 2007/2008, by \$134,000 in FY 2008/2009, and by \$104,000 in FY 2009/2010. This shortfall of revenue to expenditures will put the Program in a deficit by FY 2012/2013. Renewal revenues have increased since the April 2006 biennial renewal fee increase became effective, remaining consistent at \$1.5 million over the 2-year renewal period since FY 2007/2008, or approximately \$800,000 per fiscal year on average. Declining applications, however, will eventually reduce renewal revenue.

ANALYSIS OF FUND CONDITION	FY 2007/08	FY 2008/09	FY 2009/10 (Budget Yr)	FY 2010/11 (Projected)	FY 2011/12 (Projected)	FY 2012/13 (Projected)
Total Reserves, July 1	\$893	\$963	\$828	\$724	\$397	\$121
Total Rev. & Transfers	\$2,021	\$2,030	\$1,794	\$1,751	\$1,384	\$1,174
Total Resources	\$2,021	\$2,030	\$1,794	\$1,751	\$1,384	\$1,174
Total Expenditures	\$1,130	\$1,201	\$1,070	\$1,260	\$1,270	\$1,413
Unreimbursed Loans to General Fund	\$ N/A	N/A	N/A	N/A	N/A	N/A
Accrued Interest Loans to General Fund	\$ N/A	N/A	N/A	N/A	N/A	N/A
Reserve, June 30	\$891	\$829	\$724	\$491	\$114	\$(239)
MONTHS IN RESERVE	8.9	9.3	6.9	4.6	1.0	(2.0)

Note: Dollars listed in thousands

LICENSURE REQUIREMENTS

Education, Experience, and Examination Requirements

The Program administers licenses for geologists and geophysicists, as well as certifications for the specialty geologist titles of Certified Engineering Geologist (CEG) and Certified Hydrogeologist (CHG). To become certified as a CEG or CHG, licensure as a Professional Geologist (PG) is required and must be maintained with the specialty geologist certification.

Admittance into the Professional Geologist licensing examination by an applicant for the Professional Geologist license requires a Bachelor's Degree in geology or a geological science and three years of experience working under the responsible charge of a licensee. Two years of experience is required if an applicant has a Master's Degree and/or a Ph.D. in Geology. In addition to the Professional Geologist examination, an applicant must also take and pass the Fundamentals of Geology examination and a California Supplemental Component exam to achieve licensure as a Professional Geologist in California.

An applicant for a Professional Geophysicist license must have a Bachelor's Degree in a geophysical science or 30 semester hours in courses relevant to geophysics and a minimum of five years of experience working under the responsible charge of a licensee.

A Certified Engineering Geologist applicant must have a license as a Professional Geologist and a minimum of three years of experience in the field of engineering geology. A Certified Hydrogeologist applicant must have a license as a Professional Geologist and a minimum of three years of experience in the field of hydrogeology.

Experience is verified through the professional references that are required for approval of the application. References must be licensed and must verify through personal knowledge of the applicant's work history, the time worked by the applicant and the work performed. The applicant must disclose on the application any prior criminal history, disciplinary actions, or other unlawful acts [under penalty of perjury].

Examination Population and Passing Rates

Over the last four years, the passing percentages for all licenses and certifications have remained generally consistent within their disciplines, with the Professional Geologist exam experiencing the highest passing rate. The Professional Geophysicist exam has shown declining applicant interest over the last four years to the extent that the October 2010 examination has only two examinees scheduled to attend. This lack of interest for the exam has resulted in California not issuing a new license to a Professional Geophysicist since Fiscal Year 2007/2008.

In Fiscal Year 2009/2010, three examinations were not administered. This is the result of the Examination Committee of the former Board for Geologists and Geophysicists (BGG) recommending in early 2009 that the administration of the Professional Geophysicists examination, the Certified Engineering Geologist (CEG) examination, and the Certified Hydrogeologist (CHG) examination be moved from spring (March) to fall (October) beginning in 2010. Based on this recommendation, examinations for these three disciplines were not developed for the March 2010 scheduled examinations. These examinations will now be administered in October 2010.

An Occupational Analysis was performed on the Professional Geophysicist exam in 2005 by the Department of Consumer Affairs' Office of Professional Examination Services (OPES). An Occupational Analysis was last performed on the Professional Geologist examination and the Certified Engineering Geologist examination in 2000. An occupational analysis on the Certified Hydrogeologist examination was last completed in 1999. Due to budgetary constraints, updated occupational analyses on the examinations are not able to be scheduled.

The Program contracts with OPES to develop its examinations. The contract for each license/certification is as follows:

- \$26,018 for development of the Certified Hydrogeologist Examination (7/1/10-6/30/12);
- \$26,018 for development of the Certified Engineering Geologist exam (6/1/10-6/30/12);
- \$25,820 for development of the California Supplemental Component exam (4/1/10-6/30/2011) ;
- \$16,870 for development of the Professional Geophysicist examination (contract executed in 2009 by BGG, extended to allow development of October 2010 examination).

Due to the declining applicant interest in the Professional Geophysicist examination, the actual cost of developing the exam is increasing to the point that administering the exam has become a financial burden on the Program and the Board. From each of the two (2) applicants scheduled for the Professional Geophysicist examination, the Program receives only the \$250 application fee and \$100 exam fee. If an examination is being re-taken because it was failed previously, the Program receives only the \$100 exam from the applicant, while the cost of developing and administering the exam is approximately \$24,500 per candidate.

While the total applicant population for all of the Geologist examinations (PG, CEG, CHG) have been declining, the drop has not been so significant that there is reason to believe it will reach the levels of the Professional Geophysicist exam. Through communication with Subject Matter Experts, Technical Advisory Committee members, and other licensed geologists, there appears to be continued interest in the Certified Engineering Geologist and Certified Hydrogeologist certifications. The economy and

personal money-saving efforts by licensed geologists have prevented them from obtaining additional certifications to their license. The examination population of those two examinations may increase with a stronger economy.

Below are the passing rates for examinations given for both National ASBOG exams and California state-specific examinations:

NATIONAL ASSOCIATION OF STATE BOARDS OF GEOLOGY (National Examination)				
PROFESSIONAL GEOLOGIST	NATION-WIDE		CALIFORNIA ONLY	
	TOTAL CANDIDATES	PASSAGE RATE	TOTAL CANDIDATES	PASSAGE RATE
FY 2006/07	901	74	416	47
FY 2007/08	892	70	396	62
FY 2008/09	824	72	148	62
FY 2009/10	680	71	127	61
FUNDAMENTALS OF GEOLOGY	NATION-WIDE		CALIFORNIA ONLY	
	TOTAL CANDIDATES	PASSAGE RATE	TOTAL CANDIDATES	PASSAGE RATE
FY 2006/07	1217	58	416	47
FY 2007/08	1315	59	414	61
FY 2008/09	1203	57	209	55
FY 2009/10	983	58	133	60
* Notes – The data shown is a result of data kept by the former Board for Geologists and Geophysicists and cannot be verified for accuracy.				
CALIFORNIA STATE EXAM (State Examination)				
PROFESSIONAL GEOPHYSICIST	FY 2006/07	FY 2007/08	FY 2008/09	FY 2009/10
CANDIDATES	11	4	2	Exam not given
PASS %	82	75	0	Exam not given
CERT. ENGINEER GEOLOGIST	FY 2006/07	FY 2007/08	FY 2008/09	FY 2009/10
CANDIDATES	95	48	36	Exam not given
PASS %	46	65	64	Exam not given
CERTIFIED HYDROGEOLOGIST	FY 2006/07	FY 2007/08	FY 2008/09	FY 2009/10
CANDIDATES	63	32	22	Exam not given
PASS %	30	47	68	Exam not given
* Notes – The data shown is a result of data kept by the former Board for Geologists and Geophysicists and cannot be verified for accuracy.				

Time Frame for Certification/Licensure by the Program

The average time to process applications and issue licenses is difficult to provide because the process used by the former Board for Geologists and Geophysicists (BGG) did not have a typical application procedure. The specialty geology examinations, Certified Hydrogeologist and Certified Engineering Geologist - along with the Professional Geophysicist examination - are only administered once a year, in one location per year. Also, the Practice of Geology and Fundamentals of Geology Examinations are given in only one location each examination cycle. Because of these time and location variances, there can be a significant time lapse between an applicant submitting his or her application and that applicant taking his or her examination since the applicant often will wait six months to a year until the examination is at a convenient location. The Program is working on developing a more standardized application process.

The average time between taking the examination and the issuance of a license is also difficult to provide because once an examinee receives a passing score on his or her examination, he or she must first pay a license fee to the Program before he or she is licensed. Since the payment of a license fee was not always immediately submitted, data was not kept by BGG. Based on discussions with the Department of Consumer Affairs' executive office, the Program will begin, in Fiscal Year 2010/2011, to keep the data by tracking the date an application was received in our office until the time the application is approved to be scheduled for an examination.

Comity/Reciprocity with Other States

The Program has reciprocity with other states that utilize the National Association of State Boards of Geology (ASBOG) exam as their exams to license geologists in their state. If an applicant has taken and passed one of these examinations in another state after November 1, 1996, the Program will accept the passing score and apply it to their California application. They will not need to re-take and pass the ASBOG examination. An out-of-state applicant would still need to take and pass the California Supplemental Component examination before they can be licensed as a Professional Geologist. The Program does not offer comity or reciprocity for any other examination. Geophysicists are only licensed in one other state (Texas); however, comity or reciprocity is not available since applicants must pass the California state-specific PGp examination to obtain licensure as a Professional Geophysicist in California.

The Geologist and Geophysicist Act allows for temporary authorization for the practice of Geology or Geophysics for specific projects not to exceed 60 consecutive days in a calendar year (120 consecutive days may be granted for projects which will require more than 60 consecutive days). To qualify for temporary authorization, an application and fee must be received and paid before the application is reviewed and approved by a subject matter expert to determine if the applicant is qualified to practice geology or geophysics in this state on a temporary basis. Additional qualifications and compliances

must also be met prior to temporary authorization being granted: a) the applicant maintains no office for the practice of geology or geophysics in this state; b) the applicant is qualified to practice geology or geophysics for others and is not prohibited from doing so in the state or country where the applicant maintains an office for that practice; c) the applicant demonstrates by means of an individual appearance before the Board, or before a committee appointed by the Board for that purpose, satisfactory evidence of adequate knowledge in that phase of geology or geophysics for which the applicant proposes to practice under the temporary authorization. Upon completion of these requirements as necessary, the Executive Officer on direction of the Board shall issue a temporary authorization to the applicant. In the last four fiscal years, only one temporary authorization has been applied for, and was approved, in 2006. There have been no changes to the temporary authorization guidelines since the last sunset review of the former Board for Geologists and Geophysicists.

Continuing Education/Competency Requirements

The Geologist and Geophysicist Act does not have a continuing education requirement for its licensees, and the Board is not in active discussion to adopt the requirement. Should such a requirement be deemed necessary by the Department of Consumer Affairs or by the Legislature, the Board will proceed with the necessary actions to be in full compliance with that directive.

ENFORCEMENT PROGRAM

Enforcement of the Geologist and Geophysicist Act is a primary responsibility of the Program, and its duties are assigned to an enforcement analyst. When the responsibilities and duties of the laws were transferred from the former Board for Geologists and Geophysicists (BGG) to the Board for Professional Engineers and Land Surveyors (BPELS), approximately one hundred complaint cases were under active investigation. One analyst from BGG was transferred to BPELS to investigate these cases and continue with all other enforcement duties. Prior to the transfer, two personnel were assigned to the enforcement workload. The enforcement analyst is also responsible for answering all enforcement-related inquiries (phone calls, email, letters) from consumers, licensees, other governmental agencies, and other departmental personnel. Additionally, the enforcement analyst is also responsible for all enforcement-related legislative and regulatory proposals. The lack of sufficient staffing has not only aged the pending cases but has caused delays in the processing and investigation of new complaint cases that continue to be filed. Current budgetary restraints prohibit the hiring of additional staff.

It is the nature of the geology and geophysics professions for reports to be submitted to County and State departments that are responsible for ensuring that all seismic and environmental standards are met in site assessment reports, environmental documentation for California Environmental Quality Act (CEQA) compliance, and the determination of subsurface contaminant plumes and/or resource availability data (groundwater, minerals, oil and gas, geothermal, etc.). When reports are submitted that have been prepared by unlicensed individuals, or that are substandard in meeting the standard of care for the profession, the reports are commonly submitted by these agencies to the Program for investigation. Local and State agencies are not required by law to submit these allegedly substandard reports; however, they are strongly encouraged to do so.

All complaints filed with the Program are investigated to determine if a violation of the laws has occurred. Upon receiving a complaint, the complainant is notified in writing within 10 days that it has been received. If it appears that a violation of the law may have occurred, a formal investigative complaint will be opened. The complainant is also notified if additional information is required before an investigation can begin or of any other reason why a formal investigation cannot be initiated. Evidence is obtained from all parties involved in the matter, and an independent technical expert is utilized to provide a review of the technical aspects of the allegations. Since the technical experts are independently employed, their other priorities are taken into account before they can agree to review a case. The Program maintains a list of technical experts from which it selects the most appropriate expert for a case. Since a technical expert is chosen based on the specific details of the allegations, it can be a lengthy process to find the most appropriate one.

All complaints involving allegations of violations relating to professional practices are reviewed by an independent technical expert for their opinion of whether or not the

subject has failed to comply with the laws. Investigative results include warning letters, citations, or referrals to the Attorney General's Office or District Attorney's Office. Approximately half of the complaints received by the Program allege unlicensed geological or geophysical work by the subject of the complaint. The sources of the complaints can be broken down to approximately a third each from licensed professionals, consumers, and governmental regulatory agencies.

Statistical Overview of Enforcement Program

ENFORCEMENT DATA	FY 2006/07	FY 2007/08	FY 2008/09	FY 2009/10
Complaints Pending	62	79	78	97
Inquiries resulting in consumer complaint investigations	Total: 100	Total: 93	Total: 84	Total: 21
Complaints Received (Source)	Total: 100	Total: 93	Total: 84	Total: 26
Public	26	13	24	11
Licensee/Professional Group	14	8	7	11
Governmental Agencies	20	11	2	0
Other (anonymous, referral, opened by Staff Geologist of former BGG)	40	61	51	4
Complaints Filed (by alleged violation)	Total: 100	Total: 93	Total: 84	Total: 26
Competence/Negligence	57	55	70	17
Unprofessional Conduct	4	3	1	0
Fraud	2	0	0	0
Unlicensed Activity	33	31	10	9
Complaints Closed	Total: 57	Total: 72	Total: 74	Total: 10
Compliance Actions	Total: 41	Total: 57	Total: 54	Total: 5
Citations and Fines	6	11	6	1
Cease & Desist/Warning	35	46	48	4
Referred to Division of Investigation (DOI)	1	2	0	0
Referred for Criminal Action	Total: 0	Total: 0	Total: 1	Total: 0
Referred to AG's Office	Total: 0	Total: 1	Total: 0	Total: 0
Accusations Filed	0	1	0	0
Stipulated Settlements	Total: 1	Total: 1	Total: 2	Total: 0
Disciplinary Actions	Total: 0	Total: 1	Total: 0	Total: 0
Voluntary Surrender	0	1	0	0
Probation	0	0	1	0
Probation Violations	Total: 0	Total: 0	Total: 0	Total: 1
Suspension or Probation	0	0	0	1
* Notes – The data shown is a result of data kept by the former Board for Geologists and Geophysicists and cannot be verified for accuracy.				

Case Aging Data:

INVESTIGATIONS CLOSED WITHIN:	FY 2006/07	FY 2007/08	FY 2008/09	FY 2009/10	AVERAGE % CASES CLOSED
90 Days	48	50	59	5	46
180 Days	0	5	6	1	4
1 Year	4	2	4	1	3
2 Years	1	11	2	1	4
3 Years	1	1	3	2	2
Over 3 Years	3	3	0	0	3
Total Cases Closed	57	72	74	10	
AG CASES CLOSED WITHIN:	FY 2006/07	FY 2007/08	FY 2008/09	FY 2009/10	AVERAGE % CASES CLOSED
1 Year	0	0	0	0	0
2 Years	1	0	1	1	1
3 Years	2	0	0	0	0
4 Years	0	0	0	1	1
Over 4 Years	0	0	0	0	0
Total Cases Closed	3	0	0	2	

Citation Program Overview and Statistical Data

The Program issues administrative citations to both licensed and unlicensed individuals. The citations may contain an order of abatement and an order to pay an administrative fine to the Board of Professional Engineers and Land Surveyors up to the maximum amount of \$5,000 per violation. The citation, once final, is posted on the website and published in the newsletter.

Citations may be issued to unlicensed individuals when the investigation reveals that the unlicensed person violated the Geologist and Geophysicist Act. Although the offering and/or practicing of geological or geophysical services may constitute a criminal act, many District Attorneys' Offices are reluctant to expend their limited resources on what they consider to be minor, administrative violations. In addition, there is a one-year statute of limitations on the filing of criminal misdemeanor charges relating to unlicensed activity. In order for a Program's complaint case to be submitted to the District Attorney for consideration of criminal prosecution, the case must be investigated by the Department of Consumer Affairs' Division of Investigation (DOI) rather than by the Program's enforcement staff. If the District Attorney's Office declines to file charges against an unlicensed practice case, the Program will review the case and determine if a citation should be issued.

Citations are issued to discipline licensees who have violated the laws but are not deemed to be a threat to the health and safety of the public. The issuance of a citation also gives the Program the authority to enforce compliance from the licensee, because a failure to comply with a citation order can lead to further, and more serious,

disciplinary action against the licensee. Prior to the implementation of the citation program, minor violations of law were handled by the issuance of a letter from enforcement staff advising the licensee that continued violations could result in disciplinary action taken against the license. The Program's issuance of a citation serves as a reminder to the licensee and other licensees that the laws and regulations under which a license is granted must be followed; if not, there are professional and monetary consequences.

CITATIONS AND FINES	FY 2006/07	FY 2007/08	FY 2008/09	FY 2009/10
Total Citations	6	11	6	1
Total Citations with Fines	6	11	6	1
Amount Assessed	\$13,000	\$10,500	\$750	\$2,000
Reduced, Withdrawn, Dismissed	4	4	5	3
Amount Collected	\$13,000	\$10,500	\$750	\$1,000

Results of Complainant Satisfaction Survey

The former Board for Geologists and Geophysicists did not conduct consumer satisfaction surveys for their complaints during the years included in this Sunset Review. The Program will begin conducting these surveys beginning with in FY 2010/2011 and will keep updated statistics on the results.

ENFORCEMENT EXPENDITURES AND COST RECOVERY

Average Costs for Disciplinary Cases

Due to the complexity of most geologic or geophysical consumer complaints, the use of independent technical experts is critical to the success of the enforcement program. The use of technical experts increased in FY 2009/2010 because while the former Board for Geologists and Geophysicists had a licensed geologist on staff to review the enforcement cases, while the current Program does not. This trend of increased expenditures due to the use of independent technical experts will remain constant as long as the Program is not funded for a staff geologist.

Since the Program is budgeted for one enforcement analyst to handle all of the enforcement duties and responsibilities of the enforcement program, it causes a significant delay in the investigation and processing of enforcement cases. Since the Program does not experience a high level of prosecutions and hearings, there are minimal budgetary concerns for that area.

However, the overall expenditures of the Program will continue to increase due to a lack of sufficient staffing and the absence of a Staff Geologist. Without a Staff Geologist, the Program must extensively utilize Subject Matter Experts to provide preliminary review and advice to staff on the technical aspects of a case.

Independent technical experts are utilized by the Program to provide an in-depth review of the complaint cases and to provide an independent professional opinion of whether the allegations of a case constitute the practices of geology or geophysics and whether the subject of a complaint case performed his work within the industry standard of practice.

AVERAGE COSTS PER CASE INVESTIGATED	FY 2006/07	FY 2007/08	FY 2008/09	FY 2009/10
Total Cost of Investigation & Experts	\$54,372	\$154,313	\$134,627	\$39,331
Number of Cases Closed	57	72	74	10
Average Cost Per Case	\$953	\$2,143	\$1,819	\$3,933
AVERAGE COSTS PER CASE REFERRED TO AG	FY 2006/07	FY 2007/08	FY 2008/09	FY 2009/10
Cost of Investigation & Experts	\$48,024	\$125,694	\$103,294	\$22,265
Number of Cases Closed	1	1	2	0
Average Cost Per Case	\$48,024	\$125,694	\$51,647	\$22,265

COST RECOVERY DATA	FY 2006/07	FY 2007/08	FY 2008/09	FY 2009/10
Number of Cases Recovery Ordered	1	4	4	0
Amount of Cost Recovery Ordered	\$110,000	\$17,500	\$77,927.50	0
Amount Collected	\$13,750	\$62,000	\$61,144.87	0

COMPLAINT DISCLOSURE POLICY

Since the last Sunset Report of the former Board for Professional Geologists and Geophysicists, a new regulation was adopted, effective January 1, 2005, establishing a complaint disclosure. Title 16, Section 3067 of the California Code of Regulations outlines this policy by indicating that complaint disclosures are available to the public upon verbal or written requests and will be responded to within 10 days. The Program discloses the following information upon request after the completion of an investigation: the number of complaints against the individual, the date of receipt of the complaint, and the disposition of the complaint. If a citation or accusation is not yet final, a disclaimer is provided stating that any pending administrative action against the person is alleged until a final, legal determination is made.

Complaint information is also disclosed when it is determined that the complaint information has a direct and immediate relationship to the health and safety of another person and/or a) involves a dangerous act or condition caused by the subject of the complaint that has or could result in a severe consequence which disclosure may prevent; b) a series of complaints against a party alleging a pattern of unlawful activity where disclosure may prevent additional harm to the public; or c) a complaint has been referred to the Attorney General's Office for filing of an Accusation or a complaint has been referred to other law enforcement entities for prosecution.

CONSUMER OUTREACH, EDUCATION AND USE OF THE INTERNET

Board Website Information

The Program uses its website to offer information about the activities of the Program and the Board, including meeting agendas and minutes. The website provides information about licensing opportunities, including requirements, fee schedules, application forms, and historic information. The applications for all licenses and certifications are available on the website, along with extensive information regarding the application/licensure requirements and instructions and checklists for completing the forms. The website also provides information regarding the examination schedules, locations, and pass/fail rate statistics over the last four years. The website also includes consumer complaint information, such as instructions, forms, flow charts, and historical disciplinary action.

Consumers can check on the license status of a geologist or geophysicist by visiting the license verification section of the website. This feature provides information on the licensees including their license numbers, expiration dates, and addresses of record. The license verification feature also provides links to any disciplinary action taken against the licensee. Unfortunately, due to the current budgetary constraints, the Program is not able to employ a webmaster to update, maintain, and expand its website. With limited staff time available to work on the website, the task of expanding the content of the website has been delayed.

The Program receives many of its inquiries via e-mail and responds through the same manner, whenever possible, thus decreasing the amount of time it takes to respond to inquiries and helping to keep the Board's postage expenses down. The Board is reviewing ways to offer licensees online renewal and exam/application fee payment through credit card on the website.

Outreach Programs

The Board is actively involved with geologist and geophysicist associations and organizations. Maintaining strong relationships with those in the profession allows the Board to be proactive to trends in the industry and gives insight to possible enforcement action needed in specific areas. Most associations conduct annual meetings to allow state and local agencies to interact with licensed professionals in the field in an effort to maintain a healthy relationship with licensees. However, due to the current budgetary constraints, staff has not been able to attend these outreach meetings during the last two fiscal years.

Internet Businesses Enforcement

Internet businesses are appearing at a steadily increasing rate. With many internet-based businesses not having a permanent physical office or address, it allows for the possibility of unlicensed services to continue being offered to the consumer since communication and enforcement can be difficult. The limited number of staff in the Program makes monitoring this unlicensed practice difficult. Because of this, it is crucial that the Program be able to continue to update its website to inform the consumer of possible unlicensed practice within the State. It is also important that the Board maintains its cooperative relationship with the professional associations, organizations, consumers, and local municipalities to remain updated with current unlicensed practice in the state. It is only through this network of cooperation that the professions can remain properly licensed and regulated. Unfortunately, due to limited staffing and budgetary constraints, it is difficult for the Board and the Program to meet these goals.

Computerized Testing

Based on our number of examinees and the content of the examinations, the Program is actively researching the possibility of converting its examinations to a Computer Based Testing (CBT) format in the near future. Research includes visiting CBT sites to verify that examination parameters can be met and that they are convenient and feasible to the examinee population. It must also be determined that there is an adequate item bank of questions to continuously replenish the examination questions. The possibility of increased fees also must be explored. If the research shows that CBT is feasible and accessible, the Board may determine that it would be an efficient and effective format for the examinations.

PART 3

ISSUES IDENTIFIED BY THE BOARD FOR PROFESSIONAL ENGINEERS AND LAND SURVEYORS

ISSUES IDENTIFIED AT PRIOR SUNSET REVIEW FOR THE BOARD

The last Sunset Review of the Professional Engineers and Land Surveyors Board in 2003 identified twelve specific issues. All twelve issues identified have been addressed and resolved, with one exception. Issue Number 9: Should the Board Eliminate Certain State-Only Exams still has one outstanding issue which is the California Structural Engineering Examination.

Prior to 2004, a civil engineer applying to use the title “structural engineer” was required to pass the 16-hour California Structural examination. At that time, NCEES also provided a national examination for structural engineers, but it was not used for licensing in California. The Joint Committee questioned why the national examination, which would provide for better comity for out-of-state structural engineers, could not be used. Based on discussions during the Sunset Review process, it was determined that the Board should use the national examination in conjunction with a state specific examination/

The Board transitioned to using the NCEES Structural II national examination in conjunction with an 8-hour state-specific examination in 2004. Currently, the Board is legislatively mandated to administer a national structural engineering examination if available, and a supplemental California specific examination. Currently the Board requires applicants to pass both the NCEES SE II examination and the state-specific structural examination.

A few years ago, the Board began working with the NCEES to develop a new 16-hour national structural examination that would incorporate the material examined in the California 8-hour structural examination and the material covered in the NCEES Structural II 8-hour examination. This new examination was developed after NCEES conducted a national occupational analysis and will be the only NCEES structural examination available beginning in 2011. The NCEES will release the last NCEES SE II examination for administration in October 2010. For licensing as a California structural engineer in October 2010, applicants will be required to pass both the NCEES SE II examination and the state-specific structural examination.

Beginning in 2011, the only NCEES structural exam available will be the new 16-hour NCEES Structural Examination. The Board’s Structural Engineers Technical Advisory Committee (SE TAC) recommended to the Board in April of 2009 that the new 16-hour NCEES Structural examination be administered in California for structural licensing

beginning in April 2011, and that the legislative requirement for a California specific structural examination be eliminated as it will be redundant. The SE TAC reviewed the test plans for both the new 16-hour NCEES Structural examination and the current California specific structural examination and determined that the new NCEES examination covers all the material currently included on the California specific examination. Therefore, the Board adopted the requirement that applicants for licensure as a structural engineer be required to take and pass only the new 16-hour NCEES Structural examination. This would greatly facilitate comity licensing as all other states will be using this new examination as the only requirement for structural licensing.

In 2009, the Board sponsored legislation to eliminate the statutory language requiring administration of the California specific structural examination since it will no longer be necessary; however, even though the language/change was supported by the Structural Engineer Association of California objections to the changes by two other professional groups caused the language to be pulled from the bill. The Board is currently in the process of determining how to meet the existing statutory requirements without requiring 24 hours of examination (8 hours of it being redundant).

In order to comply with the requirements as currently stated in Business and Professions Code section 6763.1 that all structural engineer applicants be tested on their "knowledge of state laws, rules, and regulations, and of seismicity and structural engineering unique to the practice in this state," the Board has begun working with subject matter experts to develop a multiple choice, "take home" examination which will also need to be passed in order to obtain licensure in California as a structural engineer.

ISSUES IDENTIFIED BY THE BOARD TO BE ADDRESSED DURING THE SUNSET REVIEW:

FIRST NEW ISSUE – ADMINISTRATION OF EXAMINATIONS BY NATIONAL ORGANIZATION AND APPLICANT DIRECT PAYMENT OF EXAMINATION FEES TO NATIONAL ORGANIZATION

The Board currently contracts with NCEES to develop, provide, and grade 16 of the 21 examinations the Board administers to test for licensure in California. Effective in FY 2007/08, NCEES revised its policies to hold individual boards liable for national examination loss or subversion. To eliminate this liability for the average 17,000 NCEES examinations the Board uses and administers each fiscal year for testing, the Board voted to contract with NCEES to administer the national examinations and to receive the fees directly from applicants. The Board currently collects all fees and pays NCEES for examination books and grading. NCEES assesses a value to each examination question ranging from \$2,100 to \$41,000 dependent upon the examination type. For example, the FY 2007/08 NCEES Structural II Examination is composed of 4 questions with a liability of \$164,000 at \$41,000 per question. Business and Professions Code (B&P) Sections 6754 and 8740 were amended in 2006 to allow the Board to make arrangements with a public or private organization, such as NCEES, to conduct its examinations, provide examination materials, and receive payment of the required examination fees directly from applicants.

The Board is currently reviewing its statutes and regulations to appropriately split the fees between application related fees and examination related fees. This would allow the examination related fees to be paid directly to the appropriate vendors.

The Board would still determine qualifications and ultimately approve individuals for licensure.

SECOND NEW ISSUE – CRIMINAL HISTORY VERIFICATION

The Board for Professional Engineers and Land Surveyors needs to be able to obtain criminal history information for its applicants and licensees. In order to do this, the Board needs to have legislative authority to collect fingerprints from its applicants and licensees and to obtain both state and federal criminal records on its applicants and licensees.

As part of its 2003 Sunset Review, the Board recommended that it be given the authority to collect fingerprints from and obtain criminal history information about its applicants and licensees (referred to as a “fingerprint program”). The Legislature supported the recommendation and included language to enact a fingerprint program in the Board’s Sunset legislation (SB 1547). Even one of the major professional associations (CELSOC, now ACEC-CA) supported the fingerprint program proposal. However, the Department of Finance opposed the proposal due to the costs associated with its implementation and the anticipated need to increase license renewal fees to cover the costs. Therefore, the fingerprint program proposal was dropped in 2004.

In 2008, a few boards were in the news because of failures in the operation of their fingerprint programs, which allowed individuals with numerous convictions to obtain or maintain licensure to the detriment and harm of consumers. The Department of Consumer Affairs (DCA) worked with those boards to ensure that they have appropriate fingerprint programs and the ability to operate the programs effectively and appropriately. DCA also indicated a willingness to assist other boards in ensuring that they also had appropriate fingerprint authority. The Board again attempted to seek legislation to obtain such authority; however, it was not successful due to opposition from professional associations and concerns with the added costs and workload to the Department of Justice if all boards and bureaus under DCA expanded or implemented such programs at the same time.

Background and Necessity:

The Board’s applications for in-training certificates and for professional licensure require all applicants to state whether or not they have been convicted of a crime because current law allows the Board to deny certification or licensure if the applicant has been convicted of a crime substantially related to the qualifications, functions, and duties of the professional practice. However, the Board does not have the legal authority to obtain criminal history information to verify if the information provided on the applications is correct. Since the Board has no legal authority to independently verify the truthfulness of an applicant’s response, the Board must rely solely on the information provided by the applicant on the applications. This current process does not adequately protect consumers.

Additionally, the Board can take disciplinary action against a licensee if the licensee has been convicted of a crime substantially related to the qualifications, functions, and duties of the professional practice. However, the Board is not able to proactively

monitor whether its licensees have been convicted of crimes because it is not able to obtain criminal history information directly. The Board must wait for someone to submit a complaint and provide the conviction information. Again, this current process does not adequately protect consumers.

Furthermore, in January 2008, the Reporting of Legal Actions Program became operative. This program requires licensees to report criminal convictions to the Board. However, without a fingerprint program, the Board has no way to independently verify whether licensees are accurately and appropriately reporting convictions as required.

When the Board discussed seeking the legislative authority to obtain criminal history information for its applicants and licensees, some of the Board's licensees questioned why that would be necessary and was there really a problem that would justify doing this. Professional Engineers and Professional Land Surveyors have the right to go onto a person's property – without the person's consent – in order to conduct professional engineering and professional land surveying. Even without that allowance, there are many times when professional engineers and professional land surveyors are requested by consumers to go into the consumers' homes or businesses or go onto the consumers' properties in order to perform professional engineering and professional land surveying services. Without the ability to obtain criminal history information on its applicants and licensees, the Board is not able to fully meet its legislative mandate to safeguard the life, health, property, and public welfare of California's consumers of professional engineering and land surveying services.

The following are examples of situations in which the Board has been forced into a reactive, rather than proactive, response due to its inability to directly obtain criminal history information.

- A Civil Engineer who worked as a plan checker in the building permit department of a major city was convicted of soliciting bribes from consumers. He would tell consumers that for a certain amount of money paid directly to him, he could expedite the permit process for them. In fact, it would cost far less for the consumers to simply pay the city's fee for expedited processing. The Civil Engineer was convicted of soliciting bribes and was sentenced to criminal probation. Because the Board does not have the authority to directly obtain criminal records information on its licensees, the Board did not learn of this until a complaint was filed regarding the matter.
- Several years ago, the Board conducted an investigation of an unlicensed person offering land surveying services. This investigation led to a criminal conviction against the unlicensed person. The Board then received evidence that he had practicing land surveying without a license while on criminal probation. This led to further criminal convictions against him, including some that did not directly involve the practice of land surveying. The Board used these convictions to deny licensure as a land

surveyor to this person because the Board did not believe such a person should be given a license that would allow him unfettered access to people's properties. In early 2002, this person submitted a new application for licensure to the Board, as is his right under the laws. On the application, the person listed the previous convictions that the Board was aware of and also listed a new conviction for "making terrorist threats." In light of the timing of this, the Board was very concerned about this new conviction and attempted to independently obtain the full criminal history of this applicant. However, the Board was told that it could not obtain those records because it did not have the legislative authority to obtain criminal history information. It was only through the diligent investigation conducted by its enforcement staff that the Board was able to find out about not only the specific conviction the applicant had listed, but several other convictions he had failed to disclose on the application. The Board again used all of this information to deny licensure to this applicant in order to protect the life, health, safety, property, and welfare of California consumers.

- Staff was made aware, through information submitted to the Enforcement Unit by outside sources, of several licensees who have been convicted of crimes resulting from sexually-based offenses. For example:
 - An individual licensed as both a Civil Engineer and a Land Surveyor was convicted of child molestation in North Carolina. The North Carolina Board notified our Board of this and that the licensee had relocated to California. We referred the matter to the Attorney General's Office to pursue disciplinary action. During the course of preparing for the hearing on the disciplinary action, the AG's Office discovered other convictions against the licensee for sexually-based offenses, some of which had occurred in California.
 - A Professional Engineer was convicted in Federal Court of possession of child pornography on his computer. We only learned of this conviction when someone sent us a copy of a news article.
 - A Professional Land Surveyor was convicted of possession of material involving the sexual exploitation of minors. We only learned of this when a Division of Investigation (DOI) investigator happened to mention seeing an article about it. The investigator was surprised to learn that the Board was not aware of it because the investigator assumed the Board had a fingerprint program as do most of the other boards and bureaus. During the course of obtaining the court records regarding this matter on our behalf, DOI discovered that the licensee had a prior conviction for child molestation that he had failed to disclose on his application for licensure.

- An applicant for licensure disclosed on his application that he had been convicted of a sexually-based offense involving the sexual exploitation of a minor. If the applicant had not been honest and truthful on the application, we would not have known about this conviction.

The Board firmly believes that it is not fully meeting its mandate to protect the health, safety, welfare, and property of the consumers of California because of its inability to obtain criminal history information on its licensees and applicants.

If the Board were given the legislative authority to obtain criminal history information, the Board would collect fingerprints from all of its applicants and licensees and then submit them to the Department of Justice. Once the Board was listed in the system as an agency to receive criminal history information, such information would be automatically be sent to the Board whenever the information was entered into the system. The Board would no longer have to rely upon the truthfulness of its applicants to verify the information provided on applications nor would the Board have to wait for someone to submit a complaint regarding the conviction of a licensee. The Board's staff would review all of the criminal information and investigate any where the crime appeared to be substantially related to the qualifications, functions, and duties of the profession. If the evidence showed that the crime was substantially related, then the Board would use that to deny certification or licensure to the applicant or would pursue disciplinary action against the licensee.

Legislative Action Needed:

Business and Professions Code section 144 would need to be amended to specifically list the Board for Professional Engineers and Land Surveyors as one of the boards, bureaus, divisions, and programs under the Department of Consumer Affairs that may obtain both state and federal criminal history information.

In addition, new sections would need to be added to the laws to give the Board the authority to collect fingerprints from its applicants and licensees and to obtain the criminal history information of the applicants and licensees. These new sections would also describe the requirements and responsibilities of the applicants and licensees and of the Department of Justice in processing fingerprints.

The Board already has language drafted to be included in legislation for this proposal.

THIRD NEW ISSUE – THE ADDITION OF THE GEOLOGISTS AND GEOPHYSICISTS PROGRAM

Legislation enacted during the 4th Extraordinary Session of 2009 (ABx4 20) eliminated the Board for Geologists and Geophysicists and transferred all of the duties, powers, purposes, responsibilities, and jurisdiction to regulate the practices of geology and geophysics to the Board for Professional Engineers and Land Surveyors. The transfer of authority became effective October 23, 2009. The Geologist and Geophysicist Act (Business and Professions Code section 7800, et seq.) and the Rules and Regulations pertaining to the practices of geology and geophysics (Title 16, California Code of Regulations section 3000, et seq.) remain in effect. The practices of geology and geophysics are still regulated. Individuals must still obtain licensure and practice in accordance with the laws and professional standards relating to geology and geophysics. The only change is that the Board for Professional Engineers and Land Surveyors is now enforcing those laws.

When the Board for Geologists and Geophysicists was eliminated, the Board for Professional Engineers and Land Surveyors established the Geologist and Geophysicists program. The Geologist and Geophysicists program is a parallel program to that for engineers and land surveyors. The budget, staff, and online systems have been maintained as separate programs, and all fees are directed to the appropriate accounts. The former Board for Geologists and Geophysicists Fund has not been comingled with the Engineers and Land Surveyors Fund. The Sunset Review for the Geologist and Geophysicists Program has been included as Part 2 of this document as a separate and equivalent report.

The last Sunset Review of the Board for Geologists and Geophysicists in 2004 identified two specific issues. Both issues identified have been addressed and resolved. Please see the Geology and Geophysicist Program Report for further information.

ISSUES IDENTIFIED AT PRIOR SUNSET REVIEW FOR THE GEOLOGISTS AND GEOPHYSICISTS PROGRAM

The last Sunset Review of the Board for Geologists and Geophysicists in 2004 identified two specific issues. Both issues identified have been addressed and resolved.

ISSUES IDENTIFIED BY THE BOARD REGARDING THE GEOLOGISTS AND GEOPHYSICISTS PROGRAM TO BE ADDRESSED DURING THE SUNSET REVIEW:

FOURTH NEW ISSUE – GEOPHYSICISTS EXAMINATION

In the short time that BPELS has been responsible for the administration and enforcement of the laws and regulations of the Geologist and Geophysicist Act, we have noted several concerns regarding the development and administration of the Professional Geophysicist examination. Development of the most current examination (to be administered in October 2010) cost approximately \$49,000. The number of applicants scheduled for this exam administration is two (2). This results in the examination costing the Program in excess of \$25,000 per examinee. This amount includes the cost of the examination development, the use of subject matter experts, and administrative costs.

Another issue facing the development of the Professional Geophysicist examination is the recruitment of subject matter experts needed to assist in developing and constructing the examination. While there appears to be little interest in applying to take the Professional Geophysicist exam, there also appears to be little interest in licensees wanting to help develop the examination. The amount of time and personnel needed to recruit subject matter experts, conduct workshops to develop the examination, and prepare for administration of the examination for two examinees results in a significant financial burden to the Program. However, because Business and Professions Code Section 7841.1(d) requires that a written examination be administered for the Professional Geophysicist license, we are legally required to develop and administer this examination.

Our examinations are developed in coordination with the Department of Consumer Affairs' Office of Professional Examination Services (OPES). Subject Matter Experts are necessary to assist in developing the examinations so that they are constructed as a legally defensible and professionally valid examination. OPES typically requests that eight Subject Matters Experts attend each of the development workshops. Eight to ten workshops are usually conducted to develop one examination. Four examinations are developed and constructed with the assistance of OPES and our Subject Matter Experts.

There have been discussions with several licensed geophysicists about the declining applicant population and the difficulties in recruiting licensees to assist in the development of the Professional Geophysicist examination. It appears from our discussions that the declining applicant population may be the result of a lack of need for licensure in the job field. Very few employers, if any, require licensure for employment. Geophysicists are not typically hired by consumers as often as they are hired by governmental agencies to utilize their services. The job duties of a geophysicist typically involve the research and location of gas and oil on property. The practice of geophysics also involves extensive use of computer platforms and software programs.

California remains one of only two states that license Professional Geophysicists (Texas is the other state). Those that become licensed may be doing so as an addition to their resume. To BPELS and the Program, however, the licensing of Professional Geophysicists within its current applicants-to-cost ratio has become a significant financial burden.

FIFTH NEW ISSUE – STAFF CONCERNS AND STAFF GEOLOGIST

The Program has also dealt with delays in its enforcement investigations and in responding to consumer questions and comments. The functions and duties of the former Board for Professional Geologists and Geophysicists were performed by a staff of five (5) analyst and clerical positions, two (2) seasonal workers, a Senior Geologist Registrar, and an Executive Officer (who was a licensed Professional Geologist). When the duties and responsibilities were transferred to the Board for Professional Engineers and Land Surveyors, only two staff analyst positions were transferred. The Program does not have a staff geologist (while the former Board had two) and must utilize licensed professionals in the field to review applications and at times assist with consumer questions and complaints. Through a Spring Finance Letter, two additional staff positions were given to the Program, pending the passing of the FY 2010/2011 budget. Furthermore, one (1) Associate Governmental Program Analyst (AGPA) was transferred from the BPELS fund. However, the Program remains void of a staff Geologist, and the Program continues to experience a staff shortage that may continue to delay the services the Program provides to the public and to its licensees.

In November 2009, the Board held town hall meetings in both Northern and Southern California. The purpose of these meetings was to give a forum for the geologist and geophysicist communities to voice their concerns about the abolishment of the Board for Geologists and Geophysicists. One of the concerns that was aired frequently at both meetings was that there was no geologist representation on the Board for Professional Engineers and Land Surveyors and that there was no staff geologist retained to assist the Board in a professional capacity with the day-to-day geology issues. AB 1431 was introduced in 2010 to re-name the Board to the Board for Professional Engineers, Land Surveyors, and Geologists and add one Professional Geologist member and one public member to the Board. In order to add a geologist member to the staff, the Board submitted a BCP for a half-time Professional Geologist on staff and must currently rely on the use of subject matter experts who are retained on a temporary basis to provide expertise on geology issues. Therefore, it is essential that the Program be given funding and authority for a Staff Geologist.

SIXTH NEW ISSUE – GEOLOGISTS AND GEOPHYSICISTS PROGRAM BUDGET CONCERNS

The Program can increase its revenue by increasing the exam fee for the Professional Geologist exam. Business and Professions Code Section 7887(h) states:

Each applicant for registration as a geologist shall pay an examination fee fixed by the board at an amount equal to the actual cost to the board to administer the examination described in subdivision (d) of Section 7841 that shall not exceed four hundred fifty dollars (\$450).

Currently, the national examinations administered by the Program consist of a Practice of Geology exam and a Fundamentals of Geology exam. These examinations are prepared by and purchased from the National Association of State Board of Geology (ASBOG). The two national exams and a California Supplemental Component (CSC) exam must be taken and passed to achieve licensure as a Professional Geologist. The Practice of Geology exam costs the Program \$250, and the Fundamentals of Geology exam costs \$150. However, applicants are only being charged \$150 each for the exams. In order to recover costs, applicants should be charged \$250 for the Practice of Geology exam.

Furthermore, pursuant to Title 16, Division 29, Section 3005 of the California Code of Regulations, applicants are only charged one fee of \$300 if they request to take the Practice of Geology exam, the Fundamentals of Geology exam, and the California Supplemental exam (which is also required for licensure as a Professional Geologist) at the same examination administration. This results in a loss of \$200 per applicant.

If each of the examinations were charged separately, the cost would be as follows:

Practice of Geology examination (PG)	\$250
Fundamentals of Geology examination (FG)	\$150
California Supplemental Component (CSC)	\$100
Professional Geophysicist examination (PGp)	\$100
Certified Engineering Geologist examination (CEG)	\$100
Certified Hydrogeologist examination (CHG)	\$100

In the past, applicants were not charged for the California Supplemental exam if they were also taking the Practice of Geology and Fundamentals of Geology exam at the same examination administration. If an applicant was to be charged for each of the examination costs, their total pay for the exams would be \$500. Currently, they are only being charged \$300.

Test Taken by Applicant	Current Cost	Cost Should Be	Loss of Revenue
PG, FG, CSC	\$300	\$500	\$200
PG, FG	\$300	\$400	\$100
FG, CSC	\$250	\$250	\$0
PG, CSC	\$250	\$350	\$100
FG	\$150	\$150	\$0
PG	\$150	\$250	\$100
CSC	\$100	\$100	\$0

Raising the ASBOG examination fees to match the amount we spend on purchasing the examination will not only increase our revenue, it will bring us into compliance with current statute. However, both Business and Professions Code Section 7887(h) and Title 16, California Code of Regulations Section 3005 would need to be amended before we could begin to charge additional fees for the examinations.

The Program is also exploring other alternatives to increasing our revenue. This includes reviewing the exam development process of all of our examinations, increasing the costs of other examinations, or increasing the cost of license renewals. The last license renewal increase was effective January 1, 2008.

ATTACHMENTS

1. 2008 – 2010 Strategic Plan
2. Policy of the Board for Professional Engineers and Land Surveyors on Disclosure of Complaints and Disciplinary Actions
3. Structural Engineer (SE) Test Plans
 - A. California SE Examination Test Plan
 - B. NCEES 16-hour SE Examination Test Plan