

BACKGROUND PAPER FOR The California Board for Professional Engineers, Land Surveyors, and Geologists

**Joint Sunset Review Oversight Hearing, March 12, 2024
Assembly Committee on Business and Professions and the
Senate Committee on Business, Professions, and Economic Development**

BACKGROUND, IDENTIFIED ISSUES, AND RECOMMENDATIONS

BRIEF OVERVIEW OF THE CALIFORNIA BOARD FOR PROFESSIONAL ENGINEERS, LAND SURVEYORS, AND GEOLOGISTS

History and Function of the Board

The Board for Professional Engineers, Land Surveyors, and Geologists (Board or BPELSG) is responsible for licensing professional engineers, land surveyors, geologists, and geophysicists, whose decisions have major financial, health, safety, legal, and financial consequences. According to the Board:

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 of property boundaries in a residential or commercial neighborhood could cause a property owner financial loss if the property is sold or improvements were constructed based on reliance upon an incorrect boundary. A structure could be located on another individual's property, with concomitant major financial losses and inability to convey title. Geologists and geophysicists analyze the rock, soil, and groundwater resources in California and help to determine if active landslides, earthquake faults, or underground water supplies impact orderly and safe development or if they impact the health, safety or welfare of the public.¹

By ensuring that these licensed professionals have met state-approved education, experience, and examination standards, the Board protects the public from incompetent, negligent, and/or unscrupulous individuals who may offer engineering, land surveying, or geology related services without adequate knowledge and experience.

¹ Board for Professional Engineers, Land Surveyors, and Geologists 2023-24 Sunset Review Report. Pgs. 12-13

The Board's mission statement is:

“We protect the public's safety and property by promoting standards for competence and integrity through licensing and regulating the Board's professions.”

Engineering, land surveying, geology, and geophysics each have a unique history of regulation in California. Land surveying was the first to be formally regulated by the state with the establishment of the Office of the State Surveyor General and licensing requirements in 1891. Land surveyors have been required to obtain a license since that time. In 1933, the Legislature abolished the Office of the State Surveyor General and passed the Professional Land Surveyors' Act, which, in part, transferred oversight of land surveying to the Board of Registration for Civil Engineers, today referred to as the BPELSG.²

The Board of Registration for Civil Engineers and a registration requirement for Civil Engineers were established in 1929, following the collapse of the Saint Francis (San Francisquito) Dam in Los Angeles County. In 1931, the Legislature passed legislation to establish title authority for Structural Engineers, there restricting that title/designation so that only those registered civil engineers deemed by the Board of Registration for Civil Engineers to be qualified to practice structural engineering can call themselves a Structural Engineer.³ In 1947, following World War II, the Legislature established title acts for, and demanded registration of, electrical, mechanical, chemical, and petroleum engineers.⁴ At that time, the Board of Registration for Civil Engineers was renamed the Board of Registration for Civil and Professional Engineers. In 1967, the Board of Registration for Civil and Professional Engineers strengthened its oversight of electrical and mechanical engineers, subjecting both branches of engineering to practice acts in lieu of title acts. That year, the Legislature also created title acts for metallurgical and industrial engineering. The following year, the Legislature authorized the Board of Registration for Civil and Professional Engineers to create new title acts for additional branches of engineering via regulation. In 1976 and 1977, the Board of Registration for Civil and Professional Engineers created title acts and began requiring registration for the following branches of engineering: agriculture, control system, corrosion, fire protection, manufacturing, nuclear, quality, safety, and traffic engineering. In 1982, the Legislature prohibited civil engineers from practicing land surveying without a land surveyor's license and established title authority for Geotechnical Engineers. In 1985, the Legislature codified the title acts established by the Board of Registration for Civil and Professional Engineers via regulation and revoked its authority to create new title acts. In 1998, the Legislature renamed the Board of Registration for Professional Engineers and Land Surveyors the Board for Professional Engineers and Land Surveyors. In 2011, the Board for Professional Engineers and Land Surveyors was renamed the Board for Professional Engineers, Land Surveyors, and Geologists, its current name.

The state first began regulating the practice of geology in 1970 following ruinous landslides in Southern California. The Legislature established the Board for Geologists and passed the Geologist Act, which required licensure for geologists. The Legislature also established title authority for Certified Engineering Geologists. In 1972, the Legislature incorporated geophysics into the Geologist Act resulting in its renaming as the Geologist and Geophysicist Act and the Board for Geologists being renamed the Board for Geologists and Geophysicists. In 1995, that Board established title authority for Certified Hydrogeologists via regulation. In 2009, the Legislature eliminated the Board for Geologists and Geophysicists and transferred all of its duties and powers to the Board for Professional Engineers and Land Surveyors.

² Bus. and Prof. Code §§ 8700-8805

³ Title authorities are specific titles reserved for use by individuals who are licensed under a Practice Act.

⁴ Title acts restrict only the use of a professional title, but not the respective practice of that profession.

Today, the Board is responsible for regulating the professional engineers, land surveyors, geologists, and geophysicists with varying degrees of oversight (Practice Acts, Title Acts, and Title Authorities).

Practice Acts	Title Acts	Title Authorities
<ul style="list-style-type: none"> • Civil Engineer • Electrical Engineer • Land Surveyor • Mechanical Engineer • Professional Geologist • Professional Geophysicist 	<ul style="list-style-type: none"> • Agricultural Engineer • Chemical Engineer • Control System Engineer • Fire Protection Engineer • Industrial Engineer • Metallurgical Engineer • Nuclear Engineer • Petroleum Engineer • Traffic Engineer 	<ul style="list-style-type: none"> • Geotechnical Engineer • Structural Engineer • Certified Engineering Geologist • Certified Hydrogeologist

Additionally, the Board issues Engineer-In-Training (EIT), Land Surveyor-In-Training (LSIT), and Geologist-In-Training (GIT) certificates which recognize individuals who have obtained a specific level of engineering, geology, or land surveying education and/or work experience as the entry-level step towards eventual licensure.

In its 2022-2027 Strategic Plan, the Board identified the following goals and well as numerous objectives to achieve them:

- **Licensing:** Protect the public by licensing qualified individuals who provide professional services in California.
- **Applications and Examinations:** Process applications and administer examinations in a timely and accessible manner to determine individuals’ qualifications for licensure.
- **Enforcement:** Protect the public by enforcing the laws and regulations governing the Board’s professions.
- **Outreach:** Promote the importance of licensure to educate applicants, licensees, the public, and other stakeholders about the practice and regulation of the professions.
- **Laws and Regulations:** Ensure that statutes, regulations, policies, and procedures strengthen and support the Board’s mandate and mission.
- **Customer Service and Administration:** Continuously improve efficiency and quality of the Board’s services.

Board Membership and Committees

The Board consists of 15 members, eight of whom are members of the public. The Governor appoints six public members and the Senate Rules Committee and the Speaker of the Assembly each appoint one public member. The remaining Board members must include a Civil Engineer, an Electrical Engineer, a Mechanical Engineer, a Structural Engineer, another type of Professional Engineer, a Land Surveyor, and a Professional Geologist or Geophysicist. One professional member must be from a local public agency and another professional member must be from a State agency. The Governor appoints all professional members.

Board members receive \$100 per diem compensation.⁵ Members of the Board may serve no more than two, four-year terms consecutively, but may remain on the Board until the appointment of their successor or until one year has passed, whichever occurs first. The Governor may remove any member of the board for misconduct, incompetence or neglect of duty. The Board currently has two vacancies. Vacancies are required to be filled by appointment.

The current composition of the Board is as follows:

Member Name	Date First Appointed	Date Reappointed	Date Term Expires	Appointing Authority	Type (public or professional)
<p>Fel Amistad</p> <p>Amistad has been a Senior Loan Officer and Development Manager for Presto Home Loans since 2017. He has been a Professor at Kaplan Professional since 2018 and an Adjunct Professor at International Technological University since 2011. Amistad is a member of the Filipino American Chamber of Commerce. He earned a Juris Doctor degree from California Southern Law School, a Doctor of Philosophy degree in Business Administration from California Pacific University and a Master of Business Administration degree from the University of Phoenix.</p>	11/24/2015	7/2/2018 2/22/2023	6/30/2026	Governor	Public
<p>Alireza Asgari</p> <p>Asgari has been a Senior Structural Engineer at the Department of Health Care Access and Information since 2011. He was a Senior Structural Engineer at URS Corporation from 2005 to 2011 and an Engineer at Walter P. Moore Civil Engineering from 2004 to 2005. Asgari is a member of the Structural Engineers Association of Central California. He earned a Doctor of Philosophy degree in civil engineering from Purdue University and a Master of Science degree in civil engineering from the University of Tehran.</p>	6/15/2018	4/28/2022	6/30/2025	Governor	Professional

⁵ Bus. and Prof. Code § 103

Member Name	Date First Appointed	Date Reappointed	Date Term Expires	Appointing Authority	Type (public or professional)
<p>Rossana D'Antonio</p> <p>D'Antonio has been an American Society of Civil Engineers Fellow since 2014. She served in several positions at Los Angeles County Public Works from 2001 to 2023 including as Deputy Director, Assistant Deputy Director and Principal Engineer. D'Antonio is a member of the American Society of Civil Engineers Board of Directors, California State Polytechnic University, Pomona Industry Advisory Council, Women's Media Center SheSource, and the Society of Women Engineers. D'Antonio earned a Master of Business Administration degree from Pepperdine University and a Bachelor of Science degree in Civil Engineering from California State University, Fresno.</p>	8/24/2020	8/03/2023	6/30/2027	Governor	Professional
<p>Cristina Garcia</p> <p>Garcia has been a Cybersecurity Risk Specialist at the Sacramento Municipal Utility District since 2023 and was an IT Technician there from 2018 to 2023. She was a Legislative Intern for the California Peace Officers' Association in 2018. She earned a Master of Science degree in Cybersecurity Operations and Leadership from the University of San Diego and a Bachelor of Arts degree in Political Science from California State University Sacramento.</p>	9/07/2023	-	6/30/2026	Governor	Public
<p>Michael Hartley</p> <p>Hartley has been President of Bedrock Engineering Inc. since 2008. He was Survey Manager at Michael Sutherland and Associates from 1991 to 2008. Hartley is a board member of the American Council of Engineering Companies and a corporate member of the California Land Surveyors Association. He is a member of the California State University, Fresno GME Advisory Council and the Geomatics Engineering Foundation. Hartley earned a Bachelor of Science degree in Surveying Engineering from California State University, Fresno.</p>	9/29/2020	9/07/2023	6/30/2027	Governor	Professional

Member Name	Date First Appointed	Date Reappointed	Date Term Expires	Appointing Authority	Type (public or professional)
<p align="center">Coby King</p> <p>King has been President and CEO at High Point Strategies since 2013. He was a Public Affairs Executive at Ek and Ek from 2012 to 2013, Senior Vice President for California Corporate and Public Affairs at MWW Group from 2008 to 2012 and President and CEO of Coby King Enterprises from 1999 to 2008. King was Vice President of Public Affairs at Rogers and Associates from 1997 to 1999 and an Attorney at Manatt, Phelps & Phillips from 1995 to 1997 and at Skadden, Arps, Slate, Meagher & Flom from 1991 to 1993. He was Legal Counsel at the State Board of Equalization from 1993 to 1994. He is a member of the California Democratic Party Executive Board and the Sierra Club and is a vice chair of the Valley Industry and Commerce Association. King earned a Juris Doctor degree from the Georgetown University Law Center.</p>	5/29/2013	7/19/2016 1/07/2021	6/30/2024	Governor	Public
<p align="center">Guillermo Martinez</p> <p>Martinez was a Senior Transportation Engineer at the Port of Los Angeles from 2004 to 2020. He was a Transportation Engineering Associate at the Los Angeles Department of Transportation from 2001 to 2004. Martinez is a member of the Service Employees International Union, Loyola Marymount University Civil Engineering Alumni Advisory Board, American Railway Engineering and Maintenance of Way Association, Project Management Institute, and Institute of Transportation Engineers. He earned a Bachelor of Science degree in Electrical Engineering from Loyola Marymount University.</p>	5/19/2023	-	6/30/2025	Governor	Professional

Member Name	Date First Appointed	Date Reappointed	Date Term Expires	Appointing Authority	Type (public or professional)
<p>Elizabeth Mathieson</p> <p>Mathieson was a Senior Managing Scientist at Exponent from 1999 to 2019. She was a Licensed Expert for the Board for Professional Engineers, Land Surveyors and Geologists from 2009 to 2015. Mathieson was a Commissioner for the California Seismic Safety Commission from 2007 to 2011. She is a member of the Association of Environmental and Engineering Geologists, Environmental Voter Project, Swing Left East Bay, City of Alameda Democratic Club, All Rise Alameda and the Alameda Architectural Preservation Society. Mathieson earned a Master of Science degree in Engineering Geology from Stanford University.</p>	2/10/2015	7/2/2018 2/22/2023	6/30/2026	Governor	Professional
<p>Frank Ruffino</p> <p>Ruffino was the general services administrator at the California Department of Veterans Affairs; a regional administrative officer at the California Department of Fish and Games; and community partnership manager at the Richard J. Donovan Correctional Facility. From 1985 to 2000, he served multiple management positions in the California Department of Corrections and Rehabilitation. In addition, Ruffino served as chair of the Board of the California State Employees Association, and as president of the Association of California State Supervisors.</p>	5/02/2018	7/29/2020 6/30/2023	6/30/2027	Senate Rules	Public
<p>Wilfredo Sanchez</p> <p>Sanchez has been a Ranger Department Manager for Burning Man since 2001. He was a Senior Architect and Engineering Manager for Apple from 1997 to 2018. Sanchez is a member of the Apache Software Foundation and Python Software Foundation. He earned a Master of Science degree in Computer Science and Engineering from the Massachusetts Institute of Technology.</p>	9/29/2020	5/19/2023	6/30/2026	Governor	Public

Member Name	Date First Appointed	Date Reappointed	Date Term Expires	Appointing Authority	Type (public or professional)
<p>Fermin Villegas</p> <p>Villegas has served as Deputy Counsel at California Community Colleges Chancellor's Office since September 2018 and served as a Deputy Attorney General for the California Department of Justice from June 2014 - November 2015. He was previously appointed and served on the California Architects Board from March 2011 – May 2014. He earned a Juris Doctorate from University of California, Davis, School of Law in 2006.</p>	6/29/2023	-	6/30/2027	Assembly Speaker	Public
<p>Christina Wong</p> <p>Wong has been Senior Program Coordinator at the Glenn County Health and Human Services Agency since 2002. She was a Mental Health Therapist at the Butte County Probation Department from 2008 to 2020. Wong was a Master of Social Work Coordinator for the School of Social Work at the University of Alabama from 1993 to 1997. She was Dean of Student Affairs at Hong Kong Shue Yan University from 1993 to 1997. Wong earned a Master of Social Work degree from the University of Hull. She is a member of the National Association of Social Workers.</p>	9/07/2021	-	6/30/2024	Governor	Public
<p>Danny Jimenez</p> <p>Jimenez has been an Account Executive at Outfront Media since 2024. He was a Program Manager for Improve your Tomorrow from 2022 to 2024. He earned a Bachelor of Arts degree in Communications and Sociology from the University of California, Santa Barbara.</p>	2/29/2024	N/A	6/30/2027	Governor	Public

The Board does not have any standing or technical advisory committees.

The Board is a voting member of the National Council of Examiners for Engineering and Surveying (NCEES), which is responsible for developing, administering, and scoring the examinations used for fifteen of the Board's 22 licenses and certifications. Representatives from the Board travel to NCEES meetings biannually, the cost of which is included in the Board's member fees, which totals \$6,500 annually.

The Board reports that “the actions to be voted on at these annual meetings will result in changes to the criteria that are considered acceptable for licensure and to the content of the exams.” Notably, one quarter of all engineering and land surveying examination takers reside in California, yet the Board gets just one vote, equal to all other members.

The Board is also a voting member of the National Association of State Boards of Geology (ASBOG). Representatives from the Board travel to ASBOG meetings biannually, at the Board’s expense. The Board contends that participation at these meeting is equally important as these meetings are generally held to evaluate examination content and to determine exam policy and/or fees.”⁶ Californians make up one-fourth of all geology license exam takers nationwide.

Staff

Board operations are overseen by an Executive Officer and an Assistant Executive Officer. Richard B. Moore, a licensed land surveyor, has served as the Executive Officer of the Board since 2011.⁷ He previously served as the Board’s Senior Registrar Land Surveyor and the Board’s Land Surveyor Consultant. Prior to working for the Board, Moore worked in private practice for more than 25 years. Moore also serves as the Western Zone Secretary-Treasurer of NCEES from 2013-2021 and continues to actively serve on multiple national NCEES committees.

Nancy Eissler, the Board’s Assistant Executive Officer, has worked for the Board for 33 years. Prior to her role as Assistant Executive Officer beginning in 2014, she served as the Board’s Enforcement Program Manager, the Board’s liaison to the Office of the Attorney General (AG), and as clerical support to the Administrative Services and Examination Units.

Since FY 2018-19, the Board has been approved for 42.7 staff positions. Since the Board’s last sunset review in 2019, staff vacancies have hovered around seven percent (3 positions). The Board reports that it is not actively recruiting applicants to fill its three vacancies due to changing operational needs following recent business modernization efforts. For example, in October 2021, a full-time Applicant Cashier Office Technician within the Administrative Services Unit was redirected to fill a vacancy in the Licensing Unit after 60% of their job duties were automated.

The Board reports that their remaining duties were absorbed by other staff. In July 2022, the Licensing Unit upgraded the Licensing Evaluators from Program Technician II positions to Staff Services/Associate Governmental Program Analyst positions in anticipation of the expansion of licensing duties as a result of the operation changes brought on by managing the application aspects contained within the BPELSG Connect system. Furthermore, beginning January 2023, the Board eliminated two Seasonal Clerks and one Office Assistant, positions that were vacant. Additionally, the Board currently has one full time Senior Registrar Engineer position vacant as a result of a retirement and has commenced the recruitment process.

According to the Board, staff may participate in DCA-administered training courses free of charge. Moreover, the Board may contract with third parties to provide specialized training for staff whose duties require it. The Board reports that those costs are nominal.

⁶ Ibid. Pg. 20

⁷ Pursuant to Bus. and Prof. Code § 6714, the Board is required to appoint an Executive Officer.

Fiscal and Fund Analysis

The Board is self-funded from fees paid by applicants and licensees. The Legislature determines the Board's annual budget and its expenses cannot exceed its authorized expenditures. Funds equal to or more than the Board's operating budget for the next two fiscal years are considered reserve funds, which cannot exceed 24 months operating expenses.⁸ The Board is currently operating at a deficit. Total revenue has generally trended downward since the Board's last sunset review. Concurrently, the Board's expenditures have increased. At the time of this writing the Board reports that its reserve is just under one month, which the Board attributes to increasing costs, including credit card surcharges incurred when applicants apply for or renew a license online as well as expenses related to the development and implementation of a new information technology (IT) system for licensing and enforcement (BPELSG Connect).

The Board anticipates that licensee attrition could significantly render the Board's fund insolvent; revenue from license renewals accounts for roughly 80 percent of the Board's total revenue.⁹ However, the Board's executive staff conservatively estimate its reserve fund will increase to approximately two months at the end of FY 2023-24 due to an expected \$1 million to \$1.5 million reversion combined with reduced IT costs and an anticipated heavy renewal year. Nevertheless, the Board reports that it has just begun an internal fee study, which is expected to be completed by fall 2024. If needed, most of the Board's fees could be raised via regulation, but those changes likely would not be implemented until January 2026.

Fund Condition							
(Dollars in Thousands)	FY 2018/19	FY 2019/20	FY 2020/21	FY 2021/22	FY 2022/23	FY 2023/24 (projected)	FY 2024/25 (projected)
Beginning Balance (include prior-year adjustments)	\$8,787	\$7,207	\$4,879	\$3,005	\$3,690	\$2,481	\$920
Revenues and Transfers	\$8,518	\$8,572	\$8,559	\$12,528	\$11,395	\$12,541	\$11,727
Total Revenue	\$17,305	\$15,779	\$13,438	\$15,533	\$15,085	\$15,023	\$12,647
Budget Authority						\$14,103	\$14,436
Expenditures	\$11,198	\$10,935	\$11,087	\$11,743	\$12,603		
Loans to General Fund (includes EO transfer to GO (AB 84))	\$0	\$0	\$0	(\$385)	\$0	\$0	\$0
Accrued Interest, Loans to General Fund	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Loans Repaid From General Fund	\$800	\$0	\$0	\$0	\$0	\$0	\$0
Fund Balance	\$6,907	\$4,844	\$2,351	\$3,405	\$2,482	\$920	(\$1,789)
Months in Reserve	7.6	5.2	2.4	3.2	2.1	0.8	(1.5)

⁸ Bus. and Prof. Code § 128.5(a)

⁹ The Board experienced a two percent decline in renewal applications in FY 2020-21 compared to FY 2018-19 and a four percent decline in renewal applications in FY 2021-22 compared to FY 2019-20.

Business Modernization Expenses	
Fiscal Year	Expenses
2019-20	\$389,404
2020-21	\$959,859
2021-22	\$631,634
2022-23	\$538,470
2023-24 (Projected)	\$794,000

Credit Card Fees	
Fiscal Year	Transaction Fees
2019-20	\$63,535
2020-21	\$87,900
2021-22	\$152,160
2022-23	\$165,110
2023-24 (Projected)	\$175,000
2024-25 (Projected)	\$185,000

In FY 2019-20, the Board received the final payment to an \$800,000 General Fund loan made in FY 2011-12. The Board reports that the full loan has been repaid with total interest income of \$82,142.68.

The Boards expenditures fall into five categories:

Licensing: The Licensing Unit is responsible for reviewing and processing applications, licenses, and certificates under the Board’s jurisdiction. In FY 2022-23, license costs accounted for approximately 16% of Board expenses. Licensing Unit expenditures are funded by application fees.

1. Examination: The Examination Unit is responsible for developing and administering state licensing exams, determining passing scores for those exams, and issuing results to applicants for all state-specific exams. Moreover, the Examination Unit collaborates with NCEES and ASBOG as well as state vendors to ensure candidates are able to schedule their exams. Lastly, staff monitor changes to national exams and arrange occupational analyses to determine the suitability of state licensing exams. In FY 2022-23, examination costs accounted for approximately 26% of Board expenses. Costs incurred by the Examination Unit are paid for by examination fees.
2. Enforcement: The Enforcement Unit investigates complaints made against licensees and takes disciplinary action, as necessary. Enforcement costs accounted for approximately 21 percent of Board expenses in FY 2022-23. Enforcement Unit expenses are covered by renewal fees.
3. Administration: The Administrative Services Unit is responsible for supporting the day to day operations of the Board and provides administrative support for the other three units. Administrative costs accounted for roughly 22% of Board expenses in FY 2022-23. Administration expenses are funded by renewal fees.
4. DCA Pro Rata: Pro rata costs (what the Board pays the Department of Consumer Affairs (DCA) for administrative and investigative services) accounted for roughly 15% of budgeted expenses in FY 2022-23. DCA pro rata costs are paid for with revenue generated by renewal fees.

	FY 2018/19		FY 2019/20		FY 2020/21		FY 2021/22		FY 2022/23	
(Dollars in thousands)	Personnel Services	OE&E	Personnel Services	OE&E	Personnel Services	OE&E	Personnel Services	OE&E	Personnel Services	OE&E
Enforcement	\$1,329	\$1,273	\$1,265	\$1,098	\$1,078	\$1,596	\$1,301	\$1,391	\$1,286	\$1,143
Examination	\$1,124	\$1,314	\$1,051	\$1,418	\$1,177	\$1,348	\$1,181	\$1,461	\$1,165	\$1,925
Licensing	\$851	\$304	\$1,168	\$354	\$988	\$466	\$1,217	\$368	\$1,376	\$466
Administration	\$1,429	\$459	\$1,539	\$423	\$1,430	\$612	\$1,724	\$473	\$1,897	\$585
DCA Pro Rata	N/A	\$2,263	N/A	\$1,592	N/A	\$1,548	N/A	\$1,762	N/A	\$1,701
Diversion (if applicable)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
TOTALS	\$4,733	\$5,613	\$5,023	\$4,885	\$4,673	\$5,570	\$5,423	\$5,455	\$5,724	\$5,820

In November 2017, the Board began an ongoing Business Modernization effort to automate many licensing, enforcement, examination, and administrative functions. The Board has spent \$3,313,368 since FY 2019-20 to implement the BPELSG Connect, the Boards online licensing system, which has been rolled out in the following phases/releases since September 2020:

- September 2020 - Phase 1:
 - Online Engineer-in-Training and Land Surveyor-in-Training applications.
 - Online complaint submission.
- January 2021 - Phase 2:
 - Online license renewal.
 - Online address changes.
- June 2021 - Phase 3:
 - Online application for Professional Engineer licenses that do *not* require passage of a state exam (Agriculture, Chemical, Control System, Electrical, Fire Protection, Industrial, Mechanical, Metallurgical, Nuclear, and Petroleum)
- November 2021 – Release (phase) 3.5:
 - Online application for Civil Engineer and Land Surveyors, both of which require passage of a state exam.
- April 2022 – Release 4:
 - System enhancements
- October 2022 – Release 5:
 - System enhancements
- April 2023 – Maintenance and Operations Release 3:
 - Online application for Professional Geologist license and Geologist-in-Training certification.
- February 2024 – Maintenance and Operations Release 5:
 - Online application for Structural Engineer License

The Board anticipates the inclusion of online initial applications for the remaining license types (Certified Engineering Geologist, Certified Hydrogeologist, Geotechnical Engineer, Professional Geophysicist, and Traffic Engineer) in 2024 and/or 2025.

The following fee changes have been enacted via regulation since the Board’s 2019 sunset review:

- In January 1, 2021, the Board standardized renewal fees across license types, raising biennial renewal fees for Professional Engineers and Land Surveyors by \$65 and decreasing biennial renewal fees for Professional Geologists and Geophysicists by \$90.

- Since June 29, 2023, geologists pay ASBOG directly to take the national Fundamentals of Geology and Practice of Geology exams.¹⁰

Fee Schedule and Revenue							
Fee	Current Fee Amount	FY 2018/19 Revenue	FY 2019/20 Revenue	FY 2020/21 Revenue	FY 2021/22 Revenue	FY 2022/23 Revenue	% of Total Revenue
Initial Application Fees	In-Training Certificates \$75 (\$100 statutory max) Other licenses \$175 (\$400 statutory max)	\$636	\$460	\$664	\$985	\$842	7.4%
State Specific Examinations	\$175.00	\$1,214	\$968	\$894	\$1,093	\$1,069	9.4%
Biennial Renewal	\$180.00	\$6,259	\$6,833	\$6,707	\$10,142	\$9,047	79.4%
Retired License	\$75.00	\$28	\$31	\$41	\$58	\$52	.4%
Delinquency Biennial Renewal	\$90.00	\$75	\$70	\$122	\$149	\$169	1.5%
All Other Revenue	N/A	\$306	\$210	\$131	\$100	\$215	1.9%
Total Revenue	N/A	\$8,518	\$8,572	\$8,559	\$12,527	\$11,394	100%

Licensing

Accounting for more than 57,000 active licensees, Civil Engineer licensees continue to make up the largest portion of the Board’s licensee population, followed by Mechanical Engineers (15,452 active licensees), Electrical Engineers (10,921 active licensees), Professional Geologists (4,984 active licensees), Structural Engineers (4,504 active licensees), and Professional Land Surveyors (3,892 active licensees). There are fewer than 2,000 active licensees in each of the other license categories. The number of licensees in each discipline has remained relatively stable since FY 2018-19. The most notable differences include:

- Since FY 2018-19, the number of active, licensed Electrical Engineers, Fire Protection Engineers, and Structural Engineers have *increased* by 638, 163, and 146 respectively.
- Since FY 2018-19, the number of active, licensed Professional Land Surveyors, Quality Engineers, Mechanical Engineers, and Professional Geologists have *decreased* by 226, 141, 129, and 132, respectively.

¹⁰ In the spring of 2023, ASBOG examinations transitioned from paper exams for which the Board collected exam fees and paid ASBOG, to a computer-based testing format, where now applicants register with and pay ASBOG directly.

License Type	Status	FY 2018/19	FY 2019/20	FY 2020/21	FY 2021/22	FY 2022/23
Agricultural Engineer	Active	115	111	107	103	99
	Out of State	27	28	26	23	23
	Out of Country	2	1	2	2	2
	Delinquent/Expired	17	17	14	22	19
	Retired Status <i>if applicable</i>	45	47	49	51	54
	Inactive	0	0	0	0	0
	Other	0	0	0	0	0
Chemical Engineer	Active	1,908	1,917	1,880	1,840	1,820
	Out of State	538	492	532	487	500
	Out of Country	13	12	9	9	8
	Delinquent/Expired	200	216	223	326	313
	Retired Status <i>if applicable</i>	138	149	163	179	195
	Inactive	0	0	0	0	0
	Other	0	0	0	0	0
Civil Engineer	Active	57,320	57,847	57,806	57,479	57,447
	Out of State	14,704	13,785	14,618	13,882	13,892
	Out of Country	692	625	685	643	644
	Delinquent/Expired	5,291	5,316	5,326	5,717	4,498
	Retired Status <i>if applicable</i>	2,474	2,707	2,946	3,303	3,575
	Inactive	0	0	0	0	0
	Other	0	0	0	0	0
Consulting Engineer	Active	3	3	1	1	0
	Out of State	1	1	0	0	0
	Out of Country	0	0	0	0	0
	Delinquent/Expired	1	1	3	2	3
	Retired Status <i>if applicable</i>	5	5	5	5	5
	Inactive	0	0	0	0	0
	Other	0	0	0	0	0
Control Systems Engineer	Active	842	842	792	773	715
	Out of State	302	269	274	264	245
	Out of Country	3	4	3	3	3
	Delinquent/Expired	210	205	213	327	250
	Retired Status <i>if applicable</i>	325	330	346	357	373
	Inactive	0	0	0	0	0
	Other	0	0	0	0	0

License Type	Status	FY 2018/19	FY 2019/20	FY 2020/21	FY 2021/22	FY 2022/23
Quality Engineer	Active	283	257	204	176	142
	Out of State	134	153	108	89	74
	Out of Country	2	2	1	0	0
	Delinquent/Expired	105	89	96	92	96
	Retired Status if applicable	286	292	307	313	318
	Inactive	0	0	0	0	0
	Other	0	0	0	0	0
Safety Engineer	Active	256	251	233	186	160
	Out of State	117	137	112	96	81
	Out of Country	0	0	0	0	0
	Delinquent/Expired	67	55	42	81	76
	Retired Status if applicable	158	165	172	181	188
	Inactive	0	0	0	0	0
	Other	0	0	0	0	0
Structural Engineer	Active	4,358	4,395	4,375	4,451	4,504
	Out of State	1,133	1,061	1,161	1,150	1,190
	Out of Country	39	37	42	47	47
	Delinquent/Expired	178	187	183	275	297
	Retired Status if applicable	179	196	212	246	260
	Inactive	0	0	0	0	0
	Other	0	0	0	0	0
Traffic Engineer	Active	1,485	1,528	1,509	1,492	1,479
	Out of State	170	156	162	154	148
	Out of Country	6	7	6	7	6
	Delinquent/Expired	83	88	97	142	136
	Retired Status if applicable	143	151	163	175	186
	Inactive	0	0	0	0	0
	Other	0	0	0	0	0
Professional Geologist	Active	5,116	5,070	5,032	5,020	4,984
	Out of State	1,181	1,026	1,134	1,018	1,011
	Out of Country	37	29	34	58	31
	Delinquent/Expired	357	358	376	568	588
	Retired Status if applicable	90	113	137	156	183
	Inactive	0	0	0	0	0
	Other	0	0	0	0	0
Certified Engineering Geologist	Active	1,471	1,467	1,432	1,411	1,362
	Out of State	213	175	204	175	169
	Out of Country	8	8	8	7	8
	Delinquent/Expired	118	109	115	156	172
	Retired Status if applicable	27	34	44	55	65
	Inactive	0	0	0	0	0
	Other	0	0	0	0	0

License Type	Status	FY 2018/19	FY 2019/20	FY 2020/21	FY 2021/22	FY 2022/23
Certified Hydrogeologist	Active	926	928	922	894	876
	Out of State	158	123	154	132	133
	Out of Country	3	3	3	5	5
	Delinquent/Expired	34	43	43	85	93
	Retired Status if applicable	10	12	13	17	25
	Inactive	0	0	0	0	0
	Other	0	0	0	0	0
Corrosion Engineer	Active	115	142	135	115	111
	Out of State	86	90	75	62	61
	Out of Country	0	0	0	0	0
	Delinquent/Expired	48	48	48	49	41
	Retired Status if applicable	46	48	49	52	53
	Inactive	0	0	0	0	0
	Other	0	0	0	0	0
Metallurgical Engineer	Active	194	190	192	187	190
	Out of State	56	57	56	53	60
	Out of Country	1	1	1	2	1
	Delinquent/Expired	30	34	26	46	43
	Retired Status if applicable	54	56	57	63	64
	Inactive	0	0	0	0	0
	Other	0	0	0	0	0
Nuclear Engineer	Active	295	270	258	204	195
	Out of State	122	142	111	93	88
	Out of Country	1	1	1	1	1
	Delinquent/Expired	81	74	58	61	77
	Retired Status if applicable	161	171	173	186	188
	Inactive	0	0	0	0	0
	Other	0	0	0	0	0
Petroleum Engineer	Active	312	314	310	289	284
	Out of State	160	154	154	138	139
	Out of Country	5	6	4	4	4
	Delinquent/Expired	36	39	36	39	39
	Retired Status if applicable	34	35	37	40	42
	Inactive	0	0	0	0	0
	Other	0	0	0	0	0
Photogrammetric Surveyor	Active	0	0	0	0	0
	Out of State	0	0	0	0	0
	Out of Country	0	0	0	0	0
	Delinquent/Expired	1	0	0	0	0
	Retired Status if applicable	0	0	0	0	0
	Inactive	0	0	0	0	0
	Other	0	0	0	0	0

License Type	Status	FY 2018/19	FY 2019/20	FY 2020/21	FY 2021/22	FY 2022/23
Professional Land Surveyor	Active	4,118	4,086	4,013	3,956	3,892
	Out of State	709	626	693	481	643
	Out of Country	8	5	7	7	3
	Delinquent/Expired	214	218	208	209	334
	Retired Status <i>if applicable</i>	287	313	346	386	429
	Inactive	0	0	0	0	0
	Other	0	0	0	0	0
Professional Geophysicist	Active	154	148	147	150	144
	Out of State	61	62	59	62	60
	Out of Country	4	4	4	4	4
	Delinquent/Expired	21	20	18	19	22
	Retired Status <i>if applicable</i>	7	7	7	7	10
	Inactive	0	0	0	0	0
	Other	0	0	0	0	0

Out-of-state and out-of-country *applicants* are subject to the same requirements. All foreign language documents must be accompanied by a notarized English translation. Moreover, all work experience claimed by an applicant that was obtained in another state or country must be verified by a reference who is legally authorized to perform the work in the location where the experience was gained.

To assist veterans, active military service members, and their registered domestic partners/spouses, the Board does all of the following:

- Expedite application processing for honorably discharged military service personnel and registered domestic partners/spouses of active duty military service members.
- Count relevant military education and experience towards minimum requirements for licensure.
- Waive delinquency fees that may accumulate during a licensee’s active military service.

In FY 2022-23, the Board received 22 applications from honorably discharged veterans, two from military spouses, and two renewal waivers.

Moreover, under the federal Servicemembers Civil Relief Act, military service personnel and spouses who currently hold a valid license in good standing in another state, district, or territory, may practice the same profession in California if they relocate to California because of military orders. These individuals are not required to obtain a specific California license, but are required to register with the Board.

Applicants are required to pay application, exam, and renewal fees as specified in the table below. Qualifying applicants for a title authority license (Structural Engineer, Geotechnical Engineer, Certified Engineering Geologist, or Certified Hydrogeologist) must maintain either a Professional Civil Engineer License or a Professional Geologist license. In practice, that means those applicants must pay \$175 for the base license type and an additional \$175 for the specialty license type. All applicants are required to pay a fingerprint processing fee.

Fee Type	Amount
Application fee for Professional Engineer License (All Disciplines)	\$175.00
Application fee for Structural Engineer License (Title Authority)	\$175.00
Application fee for Geotechnical Engineer License (Title Authority)	\$175.00
Application fee for Professional Land Surveyor License	\$175.00
Application fee for Professional Geologist	\$175.00
Application fee for Professional Geophysicist	\$175.00
Application fee for Certified Engineering Geologist License (Title Authority)	\$175.00
Application fee for Certified Hydrogeologist License (Title Authority)	\$175.00
Application fee for Engineer-in-Training, Land Surveyor-in-Training, and Geologist-in-Training Certificates	\$75.00
Live Scan (fingerprinting) fee	Variable (out-of-state applicants must submit a fingerprint card to the Board which costs \$49)
Renewal for ALL licenses	\$180.00
Delinquency renewal fee for all licenses	\$90.00
Retired status license	\$75.00
State Exam fee	\$175.00 per exam

Applicants are required to submit fingerprints to the California Department of Justice to undergo a state and federal criminal history background check.¹¹ The Board’s fingerprint requirement only applies to new licenses, therefore not every licensee has undergone a background check.¹² Prior to July 1, 2020, applicants were also required to notify the Board of any criminal history and provide related court documents.

However, the Board reports that with the enactment of Assembly Bill (AB) 2138 (Chiu), Chapter 995, Statutes of 2018, which took effect July 1, 2020, the Board is no longer authorized to require an applicant to self-disclose criminal history during the application process. AB 2138 also prohibited the Board from denying an application for a nonviolent, nonsexual, or nonserious conviction that occurred more than seven years preceding the application. Additionally, the bill prohibited the Board from issuing a denial based on offenses that have been dismissed or expunged. However, the Board may deny issuing a license if the applicant has been convicted of a crime that is substantially related to the qualifications, functions, and duties of the profession in which they seek a license. The Board must consider any evidence of rehabilitation voluntarily provided by the applicant.

Moreover, applicants are required to report to the Board if they have been subject to disciplinary action, or had an application for licensure denied, or license revoked, by another state licensing board for engineering, land surveying, or geology. The Board has the ability to review enforcement action reported in the NCEES and ASBOG national databases, though not every board supplies that information.

The Board reports that the implementation of BPELSG Connect has hastened how quickly it is able to process complete applications, the target for which is 60 days. Since the Board’s last sunset review. The average number of days to process Engineer-in-Training and Land Surveyor-in-Training initial license applications decreased from 83 days to 13 days. Additionally, the average number of days to process initial applications for Professional Engineers in the Agricultural, Chemical, Control System, Electrical, Fire Protection, Industrial, Mechanical, Metallurgical, Nuclear, and Petroleum disciplines decreased from 107 days on average to 83 days—despite a 26% increase in the volume of initial applications received in the two years following the launch of BPELSG Connect. However, the total number of days continues to surpass the 60 day performance target. The Board reports that it approves Professional Land

¹¹ Bus. and Prof. Code § 144

¹² Cal. Code Regs. Tit. 16, § 420.1

Surveyor initial applications within 60 days, which it says is substantially less than the application processing times prior to being online though the Board is unable to provide the specific number of dates it took to process the number applications previously.

In contrast, despite efficiencies generated by BPELSG Connect, the Board reports that processing times for Civil Engineer initial applications have *increased* and the Licensing Unit currently is not meeting the 60-day performance target. The Board reported that in the 20 months following the implementation of online applications for a Civil Engineer license the volume of applications increased by 69 percent. Moreover, the Board has identified that Civil Engineer applications are taking significantly longer to process due to high rates of work experience-related deficiencies that require action from the applicant to remedy.

As of November 1, 2023, roughly one-third of applications pending Technical Review had deficiencies. The Board reports that it has assigned additional staff to review Civil Engineer initial applications and anticipates beginning to meet its performance target by summer 2024.

The Board transitioned to online initial license applications for Professional Geologists and Geologists-in-Training in April 2023. Prior to being online the Board reported that it processed those applications within 65 days and 104 days, respectively. Of note, those processing times reflect the time it took to process both complete and incomplete applications.

The Board has not transitioned online the initial license applications for the following license types: Certified Engineering Geologist, Hydrogeologist, Geotechnical Engineer, Professional Geophysicist, Structural Engineer, and Traffic Engineer. The Board reports that it takes more than 60 days to process those paper applications. Moreover, those processing times are dependent on semi-annual examination dates.

Licensees are required to renew their licenses every two years. Although licensees had the ability to renew their licenses online prior to the COVID-19 pandemic (through a discontinued portal which was ultimately replaced by BPELSG Connect in January 2021), the Board reports that it was not until the pandemic that a majority of licensees transitioned to renewing their license online. According to the Board, 90% of licensees renewed their licenses online in FY 2022-23. License renewals submitted online are generally processed within 1 to 4 days depending on what day of the week the renewal request is submitted.

Education and Experience Requirements

Engineering and Land Surveying: There are two pathways to licensure under the Professional Engineers Act and the Professional Land Surveyors' Act. Applicants can qualify via work experience only (72 months (6 years)). Alternatively, applicants must complete, at minimum, a bachelor's degree in engineering or surveying *and* 12 to 48 months of professional work experience depending on the highest level of degree completion (BS, MS, or PhD) and whether the degree was obtained from a Board-approved (ABET-accredited) school.

Geology and Geophysics: Applicants for licensure under the Geologist and Geophysicist Act are required to complete at minimum 30 semester hours, or the equivalent, in college/university courses that the Board believes are relevant to geology or geophysics. Conferral of a Bachelor's degree is not required, but the Board reports that degree non-completion is rare. Additionally, applicants must complete two to five years of professional work experience under the supervision of a licensed geologist

or geophysicist or in any other state. The number of years of professional experience that are required is dependent on the number of years of undergraduate study completed and amount of credit received for teaching geological sciences at the college level.

Examinations

The Board, and its exam vendor, Prometric, are responsible for the development, administration, and scoring of state exams. State exams are required for the following license types: Civil Engineer, Geotechnical Engineer, Traffic Engineer, Land Surveyor, Professional Geologist, Professional Geophysicist, Certified Engineering Geologist, and Certified Hydrogeologists. These exams are required by law as either a supplement to a national exam or in place of a national exam if there is none. Applicants must apply for Board approval to take any of the state exams. The Board *biannually* provides Prometric with a list of applicants who are eligible to take each state exam, except for approved Civil Engineer applicants for whom the Board provides a list quarterly. Candidates schedule exams directly through Prometric and may take the exam at any Prometric testing center throughout the United States. The Board's two state Civil Engineer exam on Seismic Principles and Engineering Surveying are available year around. Civil Engineer exam candidates may retake each exam once per quarter. The Land Surveyor and Professional Geologist state exams are administered twice annually (spring and fall). The remaining state exams are only administered once annually (either spring or fall) due to lower examinee populations. Exams are offered in English only.

With the exception of the Traffic Engineer exam, which the Board completed an Occupational Analysis (OA) of in 2017, the Board has completed an OA for every state exam since its last sunset review in 2019. The Board reports that OAs help determine which topics need to be covered, not to validate the requirement of having a state-specific exam; each exam is mandated by law. Most recently, the Board conducted an OA for each of the Civil Engineer exams and changes to those exams became effective on January 1, 2024. The Board is in the process of conducting OA for the all other state exams with completion expected by 2025.

As indicated in the table below, pass rates for each state exam are fairly dismal. In FY 2022-23, more than 50 percent of all exam takers failed (with the exception of the Professional Geophysicist exam and both Civil Engineer exams which yielded slightly better passage rates). The Geotechnical Engineer exam has had the highest rate of failure of all the state exams; over the past four fiscal years, more than 60 percent (up to 80 percent) of candidates have failed the Geotechnical Engineer exam.

License Type		Professional Geologist	Professional Geophysicist	Geotechnical Engineer
Exam Title		California Specific (CSE)	Professional Geophysicist (PGp)	Geotechnical Engineer (GE)
FY 2018/19	Number of Candidates	253	4	35
	Overall Pass %	49	25	20
	Overall Fail %	51	75	80
FY 2019/20	Number of Candidates	289	3	78
	Overall Pass %	41	33	38
	Overall Fail %	59	67	62
FY 2020/21	Number of Candidates	185	5	60
	Overall Pass %	47	40	35
	Overall Fail %	53	60	65
FY 2021/22	Number of Candidates	261	9	74
	Overall Pass %	45	44	35
	Overall Fail %	55	56	65
FY 2022/23	Number of Candidates	145	3	81
	Overall Pass %	46	100	27
	Overall Fail %	54	0	73
	Date of Last OA	2019	2019	2018
	Name of OA Developer	Board	Board	Board
	Target OA Date	2024	2025	2024
License Type		Civil Engineer	Civil Engineer	Land Surveyor
Exam Title		Engineering Surveying (CES)	Seismic Principles (CSP)	Land Surveyor State Exam (LS)
FY 2018/19	Number of Candidates	2728	2709	205
	Overall Pass %	46	47	32
	Overall Fail %	54	53	68
FY 2019/20	Number of Candidates	1929	1852	81
	Overall Pass %	48	49	41
	Overall Fail %	52	51	59
FY 2020/21	Number of Candidates	2767	2607	201
	Overall Pass %	52	57	34
	Overall Fail %	48	43	66
FY 2021/22	Number of Candidates	2223	2191	195
	Overall Pass %	50	49	38
	Overall Fail %	50	51	62
FY 2022/23	Number of Candidates	1091	1169	292
	Overall Pass %	53	51	37
	Overall Fail %	47	49	63
	Date of Last OA	2018	2018	2018
	Name of OA Developer	Board	Board	Board
	Target OA Date	2024	2024	2024

License Type		Traffic Engineer	Certified Engineering Geologist	Certified Hydrogeologist
Exam Title		Traffic Engineer (TE)	Certified Engineering Geologist (CEG)	Certified Hydrogeologist (CHG)
FY 2018/19	Number of Candidates	77	45	33
	Overall Pass %	51	53	67
	Overall Fail %	49	47	33
FY 2019/20	Number of Candidates	69	40	18
	Overall Pass %	52	73	61
	Overall Fail %	48	27	39
FY 2020/21	Number of Candidates	49	17	14
	Overall Pass %	63	65	64
	Overall Fail %	37	35	36
FY 2021/22	Number of Candidates	60	39	18
	Overall Pass %	47	51	56
	Overall Fail %	53	49	44
FY 2022/23	Number of Candidates	71	31	24
	Overall Pass %	46	42	42
	Overall Fail %	54	58	58
	Date of Last OA	2017	2019	2019
	Name of OA Developer	Board	Board	Board
	Target OA Date	2024	2024	2024

National engineering and land surveying exams are developed, administered, and scored by NCEES. NCEES began transitioning all exams to computer based testing in 2011. NCEES offers the following computer-based exams in California:

- Fundamentals of Surveying (FS)
- Principles and Practice of Surveying (PS)
- Fundamentals of Engineering (FE)
- Principles and Practice of Engineering (PE) by discipline as shown below:
 - PE Chemical
 - PE Nuclear
 - PE Petroleum
 - PE Fire Protection
 - PE Industrial and Systems
 - PE Mechanical
 - PE Electrical and Computer – Power
 - PE Electrical and Computer – Electronics, Controls, and Communications
 - PE Agricultural and Biological
 - PE Mining and Mineral Processing:
 - PE Civil
 - PE Control Systems
 - PE Metallurgical and Materials
 - PE Structural (scheduled to begin in spring 2024)

The Fundamentals of Engineering (FE) and Fundamentals of Surveying (FS) exams are intended to be taken during a candidate’s final semester of college or shortly after graduation. While the FE exam is discipline specific, the Board accepts passage of any FE exam offered by NCEES. Each of the exams is

administered year-round at NCEES-approved Pearson VUE test centers and costs \$225, payable directly to NCEES. Both exams currently consist of 110 questions which applicants have six hours to complete. Exam results are reported Pass/Fail and are typically available within 7-10 business days.¹³ Board approval is *not* required to take either the FE exam or the FS exam. Candidates may attempt each exam three times within a 12-month period.

The PE exam tests for a minimum level of competency in a particular engineering discipline. It is intended to be taken by engineers with a minimum of four years post-college work experience in their chosen field. PE exams that have a small population of candidates are administered only once a year on a select date, whereas exams with larger candidate populations are administered year-round. All exams are held at NCEES-approved Pearson VUE test centers. The length and cost of each exam vary by discipline. Exam results are reported Pass/Fail and are typically available within 7-10 business days. Board approval *is* required to take the exam. Candidates taking year-round exams may attempt the exam three times within a 12-month period.

The PS exam is intended to be taken by land surveyors with a minimum of four years post-college professional work experience. The PS exam is administered year-round at approved Pearson Vue test centers, and costs \$375, payable directly to NCEES. The exam consists of 100 questions which applicants have seven hours to complete. Exam results are reported Pass/Fail and are typically available within 7-10 business days. Candidates may attempt the exam three times within a 12-month period.

NCEES has conducted an OA of each of its exams since 2018, the most recent being its PE Structural exams in 2023. NCEES intends to conduct another OA of each exam between 2024 and 2028. Following the completion of each OA, NCEES completed the transition of their exams from paper to computer-based testing in January 2024.

National geology exams (Fundamentals of Geology (FG) and Practice of Geology (PG)) are developed, administered, and scored by ASBOG. ASBOG transitioned its national exams to computer based testing in March 2023. ASBOG administers its exams twice a year, typically on the third Friday in March and the first Friday in October.¹⁴ Applicants must apply for Board approval to take the exam. The Board sends a list of approved applicants to ASBOG twice a year. Applicants register, pay for, and select a testing location via ASBOG. The FG exam costs \$200 and the PG exam is \$250. Additionally, applicants must pay a \$75 seat fee for each exam. Applicants may take the exam at any Prometric testing center. ASBOG is responsible for conducting OAs of its exams. ASBOG last conducted an OA of each of its exams in 2023 in anticipation of transitioning to computer-based testing. As indicated in the table below, pass/fail rates differ for each national exam.

¹³ [National Council of Examiners for Engineering and Surveying](#)

¹⁴ [Association of State Boards of Geology](#)

License Type		Agricultural Engineer	Chemical Engineer	Civil Engineer
Exam Title		Agricultural and Biological Engineering Principles and Practice of Engineering (AG)	Chemical Principles and Practice of Engineering (CH)	Civil Principles and Practice of Engineering (CE)
FY 2018/190	Number of Candidates	2	60	4602
	Overall Pass %	0	73	45
	Overall Fail %	100	27	55
FY 2019/20	Number of Candidates	0	67	2264
	Overall Pass %	0	58	49
	Overall Fail %	0	42	51
FY 2020/21	Number of Candidates	2	85	4379
	Overall Pass %	100	52	51
	Overall Fail %	0	48	49
FY 2021/22	Number of Candidates	4	51	3399
	Overall Pass %	100	59	50
	Overall Fail %	0	41	50
FY 2022/23	Number of Candidates	1	75	2431
	Overall Pass %	100	51	49
	Overall Fail %	0	49	51
Date of Last OA		2023	2020	2022
Name of OA Developer		NCEES	NCEES	NCEES
Target OA Date		2028	2025	2027
License Type		Control Systems Engineer	Electrical Engineer	Fire Protection Engineer
Exam Title		Control Systems Principles and Practice of Engineering (CS)	Electrical Engineer and Computer Principles and Practice of Engineering (EE)	Fire Protection Principles and Practice of Engineering (FP)
FY 2018/19	Number of Candidates	41	889	58
	Overall Pass %	56	40	59
	Overall Fail %	44	60	41
FY 2019/20	Number of Candidates	30	535	45
	Overall Pass %	43	36	54
	Overall Fail %	57	64	46
FY 2020/21	Number of Candidates	30	408	55
	Overall Pass %	47	55	96
	Overall Fail %	53	45	4
FY 2021/22	Number of Candidates	37	569	46
	Overall Pass %	38	48	89
	Overall Fail %	62	52	11
FY 2022/23	Number of Candidates	45	490	51
	Overall Pass %	49	41	73
	Overall Fail %	51	59	27
Date of Last OA		2022	2020	2022
Name of OA Developer		NCEES	NCEES	NCEES
Target OA Date		2027	2025	2027

License Type		Industrial Engineer	Land Surveyor	Mechanical Engineer
Exam Title		Industrial and Systems Principles and Practice of Engineering (IE)	Principles and Practice of Land Surveying (PLS)	Principles and Practice of Mechanical Engineer (ME)
FY 2018/19	Number of Candidates	7	160	542
	Overall Pass %	100	54	58
	Overall Fail %	0	46	42
FY 2019/20	Number of Candidates	0	126	587
	Overall Pass %	0	56	53
	Overall Fail %	0	44	47
FY 2020/21	Number of Candidates	18	138	585
	Overall Pass %	67	49	63
	Overall Fail %	33	51	37
FY 2021/22	Number of Candidates	15	187	480
	Overall Pass %	60	50	59
	Overall Fail %	40	50	41
FY 2022/23	Number of Candidates	10	239	421
	Overall Pass %	50	47	61
	Overall Fail %	50	53	39
Date of Last OA		2020	2019	2020
Name of OA Developer		NCEES	NCEES	NCEES
Target OA Date		2025	2024	2025
License Type		Metallurgical Engineer	Nuclear Engineer	Petroleum Engineer
Exam Title		Metallurgical and Materials Principles and Practice (MT)	Nuclear Principles and Practice (NU)	Petroleum Principles and Practice (PE)
FY 2018/19	Number of Candidates	12	1	11
	Overall Pass %	83	0	36
	Overall Fail %	17	100	64
FY 2019/20	Number of Candidates	100	1	8
	Overall Pass %	31	0	100
	Overall Fail %	69	100	0
FY 2020/21	Number of Candidates	12	1	18
	Overall Pass %	58	0	33
	Overall Fail %	42	100	67
FY 2021/22	Number of Candidates	16	3	16
	Overall Pass %	75	100	13
	Overall Fail %	25	0	87
FY 2022/23	Number of Candidates	12	2	12
	Overall Pass %	75	100	42
	Overall Fail %	25	0	58
Date of Last OA		2022	2022	2023
Name of OA Developer		NCEES	NCEES	NCEES
Target OA Date		2027	2027	2028

License Type		Structural Engineer	Structural Engineer	Professional Geologist
Exam Title		Structural Principles and Practice of Engineering – Lateral Forces (SE)	Structural Principles and Practice of Engineering – Vertical Forces (SE)	Practice of Geology (PG)
FY 2018/19	Number of Candidates	244	248	185
	Overall Pass %	39	35	72
	Overall Fail %	61	65	28
FY 2019/20	Number of Candidates	100	116	89
	Overall Pass %	31	34	70
	Overall Fail %	69	66	78
FY 2020/21	Number of Candidates	190	163	170
	Overall Pass %	38	47	84
	Overall Fail %	62	53	16
FY 2021/22	Number of Candidates	210	217	181
	Overall Pass %	32	36	82
	Overall Fail %	68	64	18
FY 2022/23	Number of Candidates	225	212	156
	Overall Pass %	39	40	76
	Overall Fail %	61	60	24
Date of Last OA		2018	2018	2015
Name of OA Developer		NCEES	NCEES	ASBOG
Target OA Date		2023	2023	2023
License Type		Professional Geologist	Engineer in Training	Land Surveyor in Training
Exam Title		Fundamentals of Geology (FG)	Fundamentals of Engineering (FE)	Fundamentals of Land Surveying (FS)
FY 2018/19	Number of Candidates	369	7264	277
	Overall Pass %	70	55	32
	Overall Fail %	30	45	68
FY 2019/20	Number of Candidates	209	5878	221
	Overall Pass %	65	54	30
	Overall Fail %	35	46	70
FY 2020/21	Number of Candidates	306	5881	280
	Overall Pass %	71	54	45
	Overall Fail %	29	46	55
FY 2021/22	Number of Candidates	252	5638	338
	Overall Pass %	73	50	40
	Overall Fail %	27	50	60
FY 2022/23	Number of Candidates	258	5317	375
	Overall Pass %	56	48	37
	Overall Fail %	44	52	63
Date of Last OA		2015	2020	2020
Name of OA Developer		ASBOG	NCEES	NCEES
Target OA Date		2023	2025	2025

Enforcement

The Board's Enforcement Program is integral to its mission to protect the public and property. The Enforcement Unit is comprised of one program manager, eight full-time analysis, one part-time Retired Annuitant analyst, and one full-time clerical staff. Additionally, the Board employs four Senior

Registrars (two licensed engineers, one licensed land surveyor, and one licensed geologist) who assist the Enforcement Unit. The Registrars perform technical review of license applications, help with complaint investigations (akin to a technical consultant), act as subject-matter experts for development of state and national exam questions, and conduct outreach to professional societies.

The Board's Enforcement Unit is responsible for investigating complaints against professional engineers, land surveyors, geologists, and geophysicists. Complaints range from unlicensed activity to negligence and incompetence. Due to the nature of the work performed, issues often taken years to become apparent. The Board investigates all complaints regardless of how much time has passed and prioritizes those that suggest there may be an imminent threat to public safety. The Board reports that investigations are often complex due to the technical nature of the engineering, land surveying, geology, and geophysics fields. The Enforcement Unit collects evidence, which is then reviewed by an independent Technical Expert Consultant, whom is responsible for providing an opinion on whether the licensee's services complied with existing law and regulations.

The DCA's Division of Investigation (DOI) supports the Enforcement Unit with evidence collection when licensees are non-responsive to the Board and difficult to locate, or where special operations (such as undercover operation) are needed. DOI also helps investigate licensees alleged to have committed specified felony offenses as well as individuals alleged to have engaged in unlicensed activity. DOI reports its finding to the Board's Enforcement Unit upon completion of its investigation. If formal discipline is warranted, the Board's Enforcement Unit will refer the case to the AG for prosecution. If prosecution of criminal offenses is warranted, DOI may refer the case to the local District Attorney.

A majority of complaints stem from the public, but other sources include licensee/professional groups, governmental agencies, and the Board itself. Complaints may also be made anonymously which accounted for roughly one-tenth of all complaints in FY 2022-23.

In September 2020 with the implementation of BPELSG Connect, the complaint submission process transitioned from traditional mail to online. The Complaint Portal allows complainants to provide all of the information related to their complaint, and supporting documents, on the Board's website – even anonymously, if they wish. Consequently, the Board reports that there has been a substantial increase in the number of complaints it receives: 369 in FY 2018-19 compared to 507 in FY 2022-23. Due to the ease and anonymity which individuals can file complaints, the Board reports that numerous complaints are difficult to investigate due to insufficient information or evidence provided, thus creating additional work for staff to collect information and documents, and increasing the overall length of investigations. In February 2022, the Complaint Portal was equipped with a back-office intake system to aid in the management of complaint information and documents and to gather statistical data relating to internal work processes for workload monitoring purposes, as well as the statistical data to be reported to the public through DCA's Performance Measures reporting, DCA's Annual Report, and the Board's Sunset Review report.

COMPLAINTS	FY 2018/19	FY 2019/20	FY 2020/21	FY 2021/22	FY 2022/23
Intake					
Received	369	377	405	435	507
Closed without Referral for Investigation	62	52	50	84	149
Referred to INV	314	330	352	344	361
Pending (close of FY)	8	6	3	11	7
Conviction / Arrest					
CONV Received	3	1	1	1	2
CONV Closed Without Referral for Investigation	0	0	0	0	0
CONV Referred to INV	3	1	1	1	2
CONV Pending (close of FY)	0	0	0	1	0
Source of Complaint ¹					
Public	128	129	139	166	201
Licensee/Professional Groups	80	57	85	43	51
Governmental Agencies	11	6	17	37	31
Internal	93	105	89	75	68
Other	1	0	0	0	0
Anonymous	2	26	8	28	36
Average Time to Refer for Investigation (from receipt of complaint / conviction to referral for investigation)	10	11	5	4	7
Average Time to Closure (from receipt of complaint / conviction to closure at intake)	4	12	3	2	3
Average Time at Intake (from receipt of complaint / conviction to closure or referral for investigation)	8	10	4	4	6

Investigations: As the number of complaints has increased so too have the number of complaints referred for investigation (328 in FY 2018-19 to 363 in FY 2022-23) and the number of complaints closed without referral for investigation (62 in FY 2018-19 to 149 in FY 2022-23). While roughly 70 percent of all investigations are completed within one year, the average number of days of all investigations from start to finish has increased from 236 days to 285 days. The Board reports that on average it completes its internal investigations with 180 days. The Board attributes the increase in total investigation length to the following: the increase in the number of complaints received; difficulties recruiting independent Technical Expert Consultants with certain areas of expertise¹⁵; adapting to the implementation of BPELSG Connect; and adapting to major changes to the Board’s file management processes stemming from the COVID-19 pandemic.

Additionally, the Board reports delays also stem from DOI, to whom the Board refers approximately six percent of cases to the Board annually. Per the Board’s executive staff, DOI has had numerous staffing vacancies and rarely prioritizes cases referred by this Board; DOI is responsible for helping investigate complaints for a variety of boards whose licensees may pose a greater immediate threat to the health and safety of the public (e.g. health care professionals). Since FY 2019-20, 52 percent of now-complete cases

¹⁵ Independent Technical Expert Consultants are licensees with whom the Board contracts to provide a review of the technical issues involved in the complaint investigation cases. These professionals provide an opinion related to the standard of care in the professional practice or other laws related to the practices of professional engineering, land surveying, geology, and geophysics and whether or not the subject of the investigation complied with the laws and standards. The experts are usually employed full-time in their own practice; as such, the Board reports that some reviews extend beyond the normally requested 30 days. Furthermore, choosing experts based on their knowledge of particular areas of expertise or geographic areas can be a challenge based on the choice of experts populating the current list of experts.

that were referred to DOI took more than one year to process. Anecdotally, there have been instances where the statute of limitations on criminal offenses expired and an individual could not be prosecuted.

According to the Board, nearly 40 percent of investigations in FY 2022-23 involved non-compliance with laws that have taken effect over the past two decades. The Board, as mandated by law¹⁶, is currently developing an online program with educational reading materials and questions on California’s relevant laws and regulations, which licensees will be required to take at the time of license renewal.

INVESTIGATIONS	FY 2018/19	FY 2019/20	FY 2020/21	FY 2021/22	FY 2022/23
Desk Investigations					
Opened	328	331	363	364	363
Closed	301	335	315	375	304
Average days to close (from assignment to investigation closure)	236	277	274	279	285
Pending (close of FY)	247	239	285	271	352
Opened	328	331	363	364	363
Closed	301	335	315	375	304
Average days for all investigation outcomes (from start of investigation to investigation closure or referral for prosecution)	236	277	274	279	285
Average days for investigation closures (from start of investigation to investigation closure)	236	277	274	279	285
Average days for investigation when referring for prosecution (from start of investigation to referral for prosecution)	236	277	274	279	285
Average days from receipt of complaint to investigation closure	246	288	279	283	292
Pending (close of FY)	247	239	285	271	352

Enforcement Aging – Investigations (Average %)							
	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	Cases Closed	Average %
Closed Within:							
90 Days	56 (18.6%)	29 (8.7%)	54 (17.1%)	53 (14.1%)	54 (17.8%)	246	15.1%
91 - 180 Days	56 (18.6%)	64 (19.1%)	61 (19.4%)	64 (17.1%)	75 (24.7%)	320	19.6%
181 - 1 Year	125 (41.5%)	142 (42.4%)	107 (34.0%)	154 (41.1%)	71 (23.4%)	599	36.7%
1 - 2 Years	63 (20.9%)	98 (29.3%)	88 (27.9%)	96 (25.6%)	100 (32.9%)	445	27.3%
2 - 3 Years	1 (0.3%)	1 (0.3%)	5 (1.6%)	7 (1.9%)	4 (1.4%)	18	1.1%
Over 3 Years	0 (0.0%)	1 (0.3%)	0 (0.0%)	1 (0.3%)	0 (0.0%)	2	.001%
Total Investigation Cases Closed	301	335	315	375	304	1,630	

¹⁶ Bus. and Prof. Code §§ 6795.2, 8801.5, and 7881.5

The Board is empowered with a range of disciplinary tools to escalate punishment as needed to ensure compliance and consumer protection.

Citation and Fine: The Board issues citations to licensees who have violated the laws and regulations pertaining to their license but are not considered a threat to the public. According to the Board, there are 138 unpaid fines totaling \$525,000. Although the Board has authority to cite and fine individuals for unlicensed activity, the Board reports that it is extremely challenging to locate those individuals or to refer them to the Franchise Tax Board for collection, which requires knowing the individual’s Social Security Number.

The Board has issued an average of 82 citations over the past five fiscal years. The average number of days to issue a citation from the date of complaint receipt has been 372 days since the Board’s last sunset review. In FY 2022-23, the average number of days it took for a citation to become final was 456 days (from opening of the complaint investigation to the date the citation became final). Citations become final after 30 days and often include an order of abatement and/or be accompanied by a fine up to \$5,000 per incident per violation. . On average, fifty percent of citations are appealed. Since FY 2019-2020, there have been 156 informal conferences to hear an appeal. After an informal conference, the Board’s Executive Officer may dismiss, modify, or affirm the citation. If dismissed, the citation is considered final immediately after the dismissal is issued. However, if the citation is modified or affirmed, then it becomes final 30 days after, unless the cited person requests a formal administrative hearing. Sixty-five citations have been referred to the AG for formal appeal. If a fine is assessed, it is due within 30 days of the citation being finalized, although the Board offers some flexibility on timing of payments on case by case basis. In FY 2022-23, DCA contracted with a collection agency to collect outstanding fines owned to various boards.

CITATION AND FINE					
Citations Issued	76	79	95	84	78
Average Days to Complete (from complaint receipt / inspection conducted to citation issued)	362	379	398	380	341
Amount of Fines Assessed	\$94,500	\$140,350	\$143,500	\$155,900	\$105,250
Amount of Fines Reduced, Withdrawn, Dismissed	\$3,500	\$0	\$0	\$0	0
Amount Collected	\$48,000	\$84,467	\$108,625	\$129,965	\$73,210

Formal Discipline: Failure to comply with a citation by a license may result in formal disciplinary action. Additionally, when licensees fail to meet the standard of care or have demonstrated incompetence or have committed other violations of the laws their professional practice, the Board may pursue formal disciplinary action.

First the case is referred to the AG for review and possible preparation of an accusation against the licensee or a statement of issues relating to the denial of an application for licensure. A formal accusation alleging violations of the laws is prepared by the AG for review and signature by the Board’s Executive Officer. Once signed by the Board’s Executive Officer, it is served on the licensee. Once an accusation is served, the licensee has 15 days to return the accompanying Notice of Defense indicating a request for an administrative hearing or interest in settling the case. If the licensee does not return the Notice of Defense within 15 days, or fails to appear at an administrative hearing, a default decision is prepared by the AG for consideration of adoption by the Board. A licensee may appeal a default decision. A licensee who returns a Notice of Defense and whose case is not settled, will have an administrative hearing, after

which an Administrative Law Judge (ALJ) will prepare a proposed decision, which the Board may adopt, modify, or reject. Once finalized, a licensee may request reconsideration.

On average, the AG has filed 33 accusations per FY since the Board’s last sunset review. The average number of days between referral from the Board to the filing of an accusation was 177 in FY 2018-19. Comparatively, in FY 2019-20, FY 2020-21, and FY 2021-22, the average number of days was 92, 97, and 87, respectively. However, in FY 2022-23, the average number of days drastically increased to 159, nearly the same number of days as in FY 2018-19.

The average number of days between the receipt of the complaint and the imposition of formal discipline has generally improved over the last five fiscal years from 935 days in FY 2018-19 to 611 days in FY 2022-23. Notably, in FY 2020-21, the average number of days was 541, only one day over the Board’s target of 540 days. The Board reports that the AG and Office of Administrative Hearings are inundated with cases from the boards and bureaus under DCA as well as other state agencies, but that it has witnessed a concerted effort from both to improve processing lengths.

Of cases referred to the AG, roughly one quarter are closed within one year, roughly half are closed within two years, and roughly 75 percent are closed within three years.

Probation: When a licensee is placed on probation, their license is revoked, but the revocation is stayed by the Board. The Board imposes terms of probation, which can include requirements to take education and ethics courses, pass an examination on the Board’s laws and regulations, notify clients of their disciplinary action, and pay the Board’s costs for investigation and prosecution of the matter. Additionally, the terms of probation may include a period of suspension from practice. When the period of suspension concludes, the licensee must continue to abide by any other terms of their probation. However, if the licensee violates probation, the Board must file a Petition to Revoke Probation and go through the full formal discipline process.

ACCUSATIONS					
Accusations Filed	39	35	38	19	35
Accusations Declined	0	0	0	0	0
Accusations Withdrawn	2	2	0	3	2
Accusations Dismissed	0	1	1	0	1
Average Days from Referral to Accusations Filed (from AG referral to Accusation filed)	177	92	97	87	159
INTERIM ACTIONS					
ISO & TRO Issued	0	0	0	0	0
PC 23 Orders Issued	1	0	0	0	0
Other Suspension/Restriction Orders Issued	0	0	0	0	0
Referred for Diversion	N/A	N/A	N/A	N/A	N/A
Petition to Compel Examination Ordered	N/A	N/A	N/A	N/A	N/A
DISCIPLINE					
AG Cases Initiated (cases referred to the AG in that year)	34	38	30	35	37
AG Cases Pending Pre-Accusation (close of FY)	11	3	13	15	7
AG Cases Pending Post-Accusation (close of FY)	43	29	33	17	36

DISCIPLINARY OUTCOMES (does not include subsequent discipline; see below)					
Revocation	4	4	5	3	2
Surrender	2	2	1	1	1
Suspension only	0	0	0	0	0
Probation with Suspension	0	0	0	1	0
Probation only	11	12	10	5	4
Public Reprimand / Public Reproval / Public Letter of Reprimand	6	7	7	2	2
Other	0	0	0	1	0
DISCIPLINARY ACTIONS (includes Accusations and Subsequent Discipline)					
Proposed Decision	4	3	4	4	2
Default Decision	4	3	4	3	3
Stipulations	17	27	27	14	7
Average Days to Complete After Accusation (from Accusation filed to imposing formal discipline)	316	328	295	339	272
Average Days from Closure of Investigation to Imposing Formal Discipline	550	490	358	450	360
Average Days to Impose Discipline (from complaint receipt to imposing formal discipline)	935	737	541	743	611
PROBATION					
Probations Completed	9	10	11	7	5
Probationers Pending (close of FY)	43	40	37	30	21
Probationers Tolle	1	1	1	1	1
Petitions to Revoke Probation / Accusation and Petition to Revoke Probation Filed	8	8	16	5	5
SUBSEQUENT DISCIPLINE					
Probations Revoked	1	2	4	5	2
Probationers License Surrendered	0	2	5	2	0
Additional Probation Only	1	4	3	1	1
Other Conditions Added Only	0	0	0	0	0
Other Probation Outcome	1	0	0	0	0
PETITIONS					
Petition for Termination or Modification Granted	1	0	0	2	0
Petition for Termination or Modification Denied	0	0	0	1	0
Petition for Reinstatement Granted	1	0	1	0	0
Petition for Reinstatement Denied	0	0	1	1	1
CRIMINAL ACTION					
Referred for Criminal Prosecution	6	8	2	1	3

Enforcement Aging - Attorney General Cases (Average %)							
	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	Cases Closed	Average %
Closed Within:							
0 - 1 Year	7 (23.3%)	7 (19.4%)	10 (33.3%)	4 (17.4%)	3 (21.4%)	31	23.3%
1 - 2 Years	7 (23.3%)	12 (33.3%)	13 (43.4%)	8 (34.8%)	6 (42.9%)	46	34.6%
2 - 3 Years	3 (10%)	12 (33.3%)	6 (20.0%)	8 (34.8%)	3 (21.4%)	32	24.1%
3 - 4 Years	4 (13.4%)	(11.2%)	1 (3.3%)	1 (4.3%)	2 (14.3%)	12	9.0%
Over 4 Years	9 (30%)	1 (2.8%)	0 (0.0%)	2 (8.7%)	0 (0.0%)	12	9.0%
Total Attorney General Cases Closed	30	36	30	23	14	133	

Cost Recovery and Restitution: Cost recovery is frequently ordered in disciplinary decisions resulting in probation. The Board reports that it is more successful obtaining full recovery of costs when it allows licensees to make payments over time as opposed to requiring one lump sum payment immediately after the decision becomes effective. The Board reports that it seldom seeks cost recovery when a license is surrendered or revoked because the individual will have lost what is likely to be their primary source of income. The Board may include cost recovery as a condition of license reinstatement.

Cost Recovery					
(dollars in thousands)	FY 2018/19	FY 2019/20	FY 2020/21	FY 2021/22	FY 2022/23
Total Enforcement Expenditures	\$1.273 (in mill)	\$1.098 (in mill)	\$1.596 (in mill)	\$1.391 (in mill)	\$1.143 (in mill)
Potential Cases for Recovery	23	25	24	14	11
Cases Recovery Ordered	20	22	20	11	7
Amount of Cost Recovery Ordered	\$109,423.85	\$121,180.12	\$106,534.00	\$47,043.13	\$72,164.75
Amount Collected (at end of fiscal year; costs may be paid over several years)	\$22,726.05	\$111,930.22	\$133,271.00	\$51,257.40	\$43,544.78

Existing law authorizes the Board to order a licensee to pay restitution as a condition of probation, or as agreed to in a stipulated settlement.¹⁷ The amount of restitution ordered is typically equivalent to the amount the consumer paid for services rendered by the licensee. Or the amount paid by the consumer to another licensee to redo the work. The amount ordered may also include charges incurred by the consumer for plan or map checking fees or permit fees.

Restitution					
(list dollars in thousands)	FY 2018/19	FY 2019/20	FY 2020/21	FY 2021/22	FY 2022/23
Amount Ordered	\$0	\$7,900.00	\$6,900.00	\$0	\$0
Amount Collected	\$0	\$0	\$6,900.00	\$0	\$0

Reporting of Legal Actions Program: Existing law requires professional engineers and land surveyors, insurance companies and the courts to report criminal convictions, civil action judgements for amounts \$25,000 or greater, settlements exceeding \$50,000, and arbitration awards exceeding \$50,000.¹⁸

¹⁷ Gov. Code § 11519(d)
¹⁸ Bus. and Prof. § 6770

According to the Board, reported settlement amounts have averaged roughly \$663,000 over the last three fiscal years. While reporting has improved from licensees and insurance companies, the Board reports difficulty receiving official court records.

Public Information Policies

The Board communicates with applicants, licensees, and the public via email, social media (Facebook and X), and its website which contains the following resources:

- Information on applicable laws and regulations.
- *The Bulletin*, the Board's newsletter.
- Meeting materials.
- Notices of rulemaking proposals.
- License application information.
- An annual calendar.
- Consumer guides to engineering, land surveying, geology, and geophysics.
- An online complaint portal.
- A license search tool

Meeting notices and agendas (one document) are posted on the website's homepage at least 10 days in advance of every meeting. Additional meeting materials are posted within one week of posting the meeting notice. Meeting minutes are generally posted on the Board's website the day after the Board meeting at which they were approved and adopted. Meeting agendas, materials, and minutes are posted on the Board's website for five years.

The Board provides the following information about licensees on its website via its license search tool:

- License numbers
- Issue and expiration dates
- Addresses of record
- Disciplinary action taken against a licensee

In response to the COVID-19 pandemic, the Board began meeting virtually via WebEx. In 2023, the Board elected to schedule half its meetings at DCA headquarters in Sacramento so the Board could offer in-person and remote options public participation. The other half of in-person meetings were held at various locations around the state.

The Board also maintains a repository of names and contact info for professional engineers, land surveyors, geologists, and geophysicists employed by every city, county, city and county, and special district through its Notice of Department Designation form. This information is required to be provided by local public agencies for the purposes of disclosing which staff member(s) at the public agency is/are in responsible charge of the respective engineering and land surveying duties for their agency. This information is made available to consumers, upon request, when they need to interact with a public entity since it is the individual licensed staff member at the agency who is licensed to perform the regulated activities, not the public agency itself.

Pursuant to its Policy on Disclosure of Complaints and Disciplinary Action, the Board keeps records of complaint investigation cases that do not result in citations or formal disciplinary actions for five years. Upon request, the Board will provide the following information:

- Number of complaints against the individual

- Date the complaint(s) was/were received
- Disposition of the complaint (e.g. compliance obtained, mediated/resolved, referred for formal legal and/or disciplinary action, or any other action taken against the licensee)

The Board does not report complaints that are currently being investigated or if the investigation reveals that the licensee did not violate the law.

The Board keeps records of citations and formal disciplinary action in perpetuity, and discloses the actions taken, reason(s) for the action, and date of the action upon request. Formal disciplinary actions are posted via the Board's online license search tool once they become final. Additionally as required by law, the Board posts accusations of its website once they are filed.¹⁹ If a citation or decision has not been finalized, an update on the status of the citation or disciplinary action is provided.

Enforcement actions are also published in the Board's newsletter.

Workplace Development and Job Creation

Applicants: The Board recognizes the need for an efficient licensing process to allow qualified individuals to enter the profession without delay. The Board has established targets for processing applications and renewals, and reports that the transition to online applications and the ability to for applicants to take computer-based examinations anywhere in the country generally make the licensing process easier for applicants. Since the implementation of BPELSG Connect, the Board reports that it has received a record number of applications for the Professional Engineer license types.

Pipeline: The Board has College Outreach Program and maintains a database of contact information for the deans and department heads of every higher education engineering, land surveying, and geology program in California. Program staff conduct outreach on campus at events such as "Engineering Day," and notify the relevant deans and department heads of legislative and regulatory changes as well as updates to Board practices.

Diversity, Equity, and Inclusion: When its strategic plan was updated in 2021, the Board included specific objectives related to DEI, primarily with respect to education and outreach to underserved populations. The Board reports that its executive leadership and managers have attended DCA workshops on DEI.

COVID-19 Pandemic Response

The Board reports that the majority of professional engineers, land surveyors, geologists, and geophysicists were deemed "Essential Workers" during the COVID-19 pandemic.

At the onset of the pandemic, the Board began meeting remotely and continued to do so until March 2022. Since then, the Board has hosted a minimum of three meetings in Sacramento, which allows for public participation remotely. The Board hosts additional in-person meetings across the state.

The Board reports that examinations were temporarily impacted by the pandemic. Both state and national exams were canceled in the spring 2020. Exams were available on a limited basis until 2022.

¹⁹ Bus. and Prof. Code § 27

PRIOR SUNSET REVIEW: CHANGES AND IMPROVEMENTS

The Board last underwent a sunset review by the Legislature in 2019. During the prior sunset review, committee staff raised a number of issues and provided recommendations. Below is a summary of actions which have been taken over the last five years to address these issues. Previous issues that were not completely addressed or may otherwise still be of concern they are further discussed under “Current Sunset Review Issues.”

Prior Issue #1: *What is the status of the long term fund condition?*

In 2019, the Board reported that its expenditures outpaced revenues by \$2 million in FY 2017-18 and that it was pursuing fee changes via the regulatory process to ensure the Board’s fiscal solvency. The fee changes, which standardized fees for all professions, took effect on January 1, 2021. See Current Issues section for further discussion.

Prior Issue #2: *Does the Board need more staff in order to meet its performance goals?*

In 2019, the Board reported lengthy application processing times due to the following:

- Variance in requirements for each license type.
- Limited opportunities for applicants to take requisite exams, resulting in applications pending for months.
- The use of an antiquated licensing system whose updates and fixes were lengthy and costly, if possible at all.

In September 2020, the Board began phasing in a new online application and licensing management system, BPELSG Connect. The Board was initially able to reduce processing times, but now has a backlog of applications due to a significant increase in the number of applications received (mainly civil engineering applications). The Board reports that it has increased the number of staff reviewing applications to reduce the backlog. See Current Issues section for further discussion.

Prior Issue #3: *Does the new test for determining employment status, as prescribed in the court decision *Dynamex Operations West Inc. v. Superior Court*, have any potential implications for licensees of the Board working as independent contractors?*

In 2019, the Board was asked whether the California Supreme Court’s 2018 *Dynamex Operations West Inc. v. Superior Court*, which established specific criteria for determining whether an individual is an employee or an independent contractor, would impact licensees. The Board reports that the decision has not impacted the Board’s operations, nor is the Board aware of any impacts to its licensees.

Prior Issue #4: *Why are the Board’s enforcement timeframes increasing?*

In 2019, the Board reported that despite its own efforts to streamline the Board’s enforcement process, DOI took more than one year investigate more that 57 percent of cases referred by the Board that were ultimately completed. DOI, which is responsible for investigating cases for nearly all boards and bureaus under DCA, does not, according to the Board, prioritize cases pertaining to engineering, land surveying, geology, and geophysics, because they rarely present the same level of threat to the public. The Board reports that it continues to work on reducing its enforcement timeframes. See Current Issues section for further discussion.

Prior Issue #5: What is the Board doing to counteract unlicensed activity?

In 2019, the Board reported that it had witnessed a spike in unlicensed activity, largely stemming from the advancement and democratization of technologies (E.g., Global Positioning System (GPS) and Ground Penetrating Radar (GPR) used to render land surveying and geophysical services. At the time, the Board reported that the concern was not so much that these tools were being utilized by laypersons, but that unlicensed individuals were interpreting resulting data and making subsequent recommendations, which constitute the practice of land surveying and geophysics in California. The Board reported that it had conducted outreach at industry events and formed a relationship with the California Facilities Safe Excavation Board. However, the Board continued to receive complaints about unlicensed activity and encounter businesses with no knowledge of the state’s licensing requirements. According to the Board it is currently continuing its efforts to reduce unlicensed activity and has been with concerned professional associations to discuss ways in which they can collaborate. See Current Issues for further discussion.

Prior Issue #6: What is the status of BreEZe implementation by the Board?

In 2019, the Board was asked the status of its BreEZe implementation. The BreEZe Project was intended to replace DCA boards’ and bureaus’ standalone legacy systems with an integrated online platform for applicant tracking, licensing, renewal, enforcement monitoring, cashiering, and data management. Additionally, the BreEZe platform was designed to enable complaint submission and license verification online. Nonetheless, as the Board reported during its prior sunset review, it was one of 19 boards and bureaus that were removed from the BreEZE project entirely in 2015 and at that time continued to use legacy systems. However, the Board has since implemented BPELSG Connect with provides the same functionality as the BreEZe system was intended to.

Prior Issue #7: Is there a need for technical cleanup?

In 2019, the Board identified several code sections that required technical changes that were ultimately included in its sunset bill. Additionally, the Board reports that legislation has been enacted in the years since making further changes.

Prior Issue #8: Should the licensing and regulation of professional engineers, land surveyors, and geologists be continued and be regulated by the current Board membership?

AB 1522 (Low), Chapter 630, Statutes of 2019 extended the Board’s sunset date by four years. In response to the COVID-19 pandemic, SB 1443 (Roth), Chapter 625, Statutes of 2022, subsequently extended the Board’s sunset date by one year to January 1, 2025.

**CURRENT SUNSET REVIEW ISSUES FOR THE
BOARD FOR PROFESSIONAL ENGINEERS, LAND SURVEYORS,
AND GEOLOGISTS**

FISCAL ISSUES

ISSUE #1: *Long-Term Fund Condition. Are fee increases needed to sustain the Board? Should licensees be required to pay a credit card surcharge when paying for license applications, renewals, and exam fees on the Board’s website?*

Background: The Board is self-funded its budget is entirely funded by fees paid by applicants and licensees. Since its last sunset review, the Board’s total revenue has generally trended downward, while concurrently, the Board’s expenditures have increased. At the time of this writing, the Board reports that it has just less than one month’s expenses in reserve, which the Board attributes to increasing costs, including credit card surcharges incurred when applicants apply for or renew a license online. Since FY 2019-20, the Board has absorbed the cost of all credit card surcharges. However, doing so is becoming more financially burdensome to the Board as a greater number of licensees apply for or renew their license online. In FY 2022-23, 90% of licensees renewed their licenses online.

Credit Card Fees	
Fiscal Year	Transaction Fees
2019-20	\$63,535
2020-21	\$87,900
2021-22	\$152,160
2022-23	\$165,110
2023-24 (Projected)	\$175,000
2024-25 (Projected)	\$185,000

In addition, the Board has been using its reserves to fund its Business Modernization efforts. Since FY 2019-20, the Board has spent \$3,313,368 to implement its licensing and enforcement system, BPELSG Connect. The Board anticipates that licensee attrition could render the Board’s fund insolvent considering that revenue from license renewals accounts for roughly 80 percent of the Board’s total revenue.²⁰ However, the Board’s executive staff conservatively estimate that after an expected \$1M-\$1.5M budget reversion combined with reduced IT costs and an anticipated heavy renewal year will increase the Board’s reserve fund up to about 2 months. Nonetheless, it is unclear how the Board, at present, would cover significant unanticipated costs such as a lawsuit.

The Board reports that it has just begun an internal fee study which is expected to be completed by fall 2024. The Board reports that most of its fees could be raised via a rulemaking, but those changes likely would not be implemented until January 2026.

Staff Recommendation: *The Board should keep the Committees apprised of the results of its fee study and plans to modify fees via its rulemaking authority. Additionally, the Board should consider the appropriateness and need for licensees to pay credit card fees associated with license application and renewal online.*

²⁰ The Board experienced a two percent decline in renewal applications in FY 2020-21 compared to FY 2018-19 and a four percent decline in renewal applications in FY 2021-22 compared to FY 2019-20.

LICENSING ISSUES

ISSUE #2: Reciprocity Agreements. Should the Legislature establish reciprocity for UK-based chartered engineers?

Background: The Board reports that as a result of the signing of the Atlantic Declaration for Twenty-First Century U.S.-U.K. Economic Partnership,²¹ the NCEES and the Engineering Council in the United Kingdom (ECUK) are currently developing a mutual recognition agreement to more easily enable U.S.-based licensed engineers to practice in the UK and vice versa. In February 2024, representatives of the Board traveled to the UK to meet with ECUK and UK governmental officials to learn more about their licensing requirements and the industry more broadly. The Board reports that at this time its goal is to ensure that the licensing requirements established in the mutual recognition agreement sufficiently protect consumers.

Existing law authorizes the Board to establish relationships with comparable licensing entities in other countries “for the purposes of working toward uniformly high professional standards and mutual recognition of registration and licensure,”²² but the Board acknowledges that should the Board decide to accept the agreement as an alternate pathway to licensure for professional engineers, it is anticipated that legislative authorization and a subsequent rulemaking would be required for the Board to implement the alternate pathways established by the mutual recognition agreement.

Staff Recommendation: *The Board should continue to keep the committees comprised of the status of the mutual recognition agreement and established license requirements therein.*

ISSUE #3: Limited Liability Partnerships. Should the Legislature indefinitely allow the Board to issue a license to a limited liability partnerships?

Background: Existing law authorized engineers and land surveyors to offer their services through various types of business entities, including, until January 1, 2026, a Limited Liability Partnership (LLP). The American Council of Engineering Companies – California (ACEC-CA) is seeking to delete the sunset date from statute, thereby allowing engineers and land surveyors to continue conducting business as a limited liability partnership indefinitely.²³ ACEC-CA sponsored the original bill and subsequent bills that extended the sunset date. In 2018, they sponsored SB 920 (Cannella), Chapter 150, Statutes of 2018, that would have eliminated the sunset date. However, the sunset date was added back in and extended when the bill was heard by the Senate Judiciary Committee.

Staff Recommendation: *The Board should notify the Committees of any complaints received from consumers related to engineers and land surveyors offering their services through an LLP that would justify the imposition of a continued sunset date.*

²¹ [The Atlantic Declaration: A Framework for a Twenty-First Century U.S.-UK Economic Partnership](#)

²² Bus. and Prof. Code § 6741

²³ Bus. and Prof. Code §§ 6738 and 8729

EDUCATION AND EXAMINATION ISSUES

ISSUE #4: *Continuing Education. Should the Legislature require licensees to complete continuing education as a condition of license renewal?*

Background: In its 2022-27 Strategic Plan, the Board included an objective to require licensees to complete continuing education on their respective professional practices. The Board has subsequently established a workgroup of two board members and the Board's executive leadership to assess the feasibility of implementing a continuing education requirement. The Board reports that the workgroup's efforts are in their infancy. Nonetheless, that Board suggests that it may need to seek statutory authorization to impose a continuing education requirement, pending recommendations from its committee.

Staff Recommendation: *The Board should keep the Committees comprised of its committee's findings and recommendations. Additionally, the Board should consider alternative methods to assess competency.*

ISSUE #5: *Education and Experience Requirements. Should geologist and geophysicist applicants be able to substitute work experience for some of the required education?*

Background: Individuals applying for an Engineer-in-Training, Professional Engineer, Land Surveyor-in-Training, or Professional Land Surveyor license are required to have completed a minimum amount of work experience. Specific education is not required but can count towards some of the required work credit. In contrast, education is required for certification or licensure as a Geologist-in-Training, Professional Geologist, or Professional Geophysicist. The Board is currently considering the appropriateness of allowing geologist and geophysicist applicants to substitute work experience for a portion educational requirements. According to the Board, some of the educational requirements have prevented otherwise qualified individuals from obtaining licensure. For example, applicants are required to complete a specified number of hours in field course work. During the COVID-19 pandemic, many field work courses were cancelled or moved online, which does not meet the Board's requirements for licensure. The Board reports that it has denied applications for this reason. Moreover, the Board reports that applicants who completed education requirements many years before applying for a license may no longer qualify if the education requirements have changed. The Board is just beginning to study this matter and suggests that it may seek statutory authorization to allow applicants to substitute work experience for education on a limited basis in the future.

Staff Recommendation: *The Board should report to committees the number of applicants who have been denied licensure for the aforementioned reasons. Moreover, the Board should consider whether the proposal being considered is necessary as the COVID-19 pandemic subsides.*

ISSUE #6: *Exam Passage Rates. Why are state exam passage rates so low?*

Background: The Board, and its exam vendor, Prometric, are responsible for the development, administration, and scoring of state exams. State exams are required for the following license types: Civil Engineer, Geotechnical Engineer, Traffic Engineer, Land Surveyor, Professional Geologist, Professional Geophysicist, Certified Engineering Geologist, and Certified Hydrogeologists. These exams are required

by law as either a supplement to a national exam or in place of a national exam if there is none. Applicants must apply for Board approval to take any of the state exams. Each exam is offered in English only.

With the exception of the Traffic Engineer exam, which the Board completed an OA of in 2017, the Board has completed an OA for every state exam since its last sunset review in 2019. The Board reports that OAs help determine which topics need to be covered, not to validate the requirement of having a state-specific exam; each exam is mandated by law.²⁴ Most recently, the Board conducted an OA for each of the Civil Engineer exams and changes to those exams became effective on January 1, 2024. The Board is in the process of conducting OA for the all other state exams with completion expected by 2025.

Pass rates for each state exam are fairly dismal. In FY 2022-23, more than 50 percent of all exam takers failed (with the exception of the Professional Geophysicist exam and both Civil Engineer exams which yielded slightly better passage rates). The Geotechnical Engineer exam has had the highest rate of failure of all the state exams; over the past four fiscal years, more than 60 percent (and up to 80 percent) of candidates have failed the Geotechnical Engineer exam.

Staff Recommendation: *The Board should determine the reason(s) for such low passage rates and anything it could do differently to support candidates. Moreover, the Board should consider the purpose and need for a state-specific licensing exams and report to the Committees its findings. If legislative changes are needed the Board should share amendments with the Committees.*

ENFORCEMENT ISSUES

ISSUE #7: Investigation Timelines. What can be done to reduce processing times for the Board's complaint investigations?

Background: The Board refers a small number of cases to the DCA's Division of Investigation (DOI). However, because DOI is responsible for helping nearly all DCA boards and bureaus investigate cases, the Board reports that its own cases are rarely prioritized, causing significant delays. In 2019, the Board reported that DOI took more a year to complete its investigation in 57 percent of cases referred by the Board. Five years later, the Board reports that over the last four fiscal years, DOI has taken more than one year to investigate 52 percent of the cases referred by the Board. According to the Board, "It would be beneficial to all boards and bureaus if DOI were able to increase the number of investigators it employs and to also create specific units within DOI to handle specific types of cases or to work with specific boards."

Staff Recommendation: *The Board should consider whether there are additional changes that would improve the overall processing time of complaints received by the Board.*

ISSUE #8: Unlicensed Activity. What can the Board do to combat unlicensed activity?

Background: In 2019, the Board reported that it had witnessed a spike in unlicensed activity, largely stemming from the advancement and democratization of technologies (I.e. Global Positioning System (GPS) and Ground Penetrating Radar (GPR) used to render land surveying and geophysical services. At the time, the Board reported that the concern was not so much that these tools were being utilized by

²⁴ Bus. and Prof. Code § 6736.1, 8741.1, 7841(d), 7841.1(d), 7842(b)

laypersons, but that unlicensed individuals were interpreting resulting data and making subsequent recommendations, which constitute the practice of land surveying and geophysics in California. The Board reported that it had conducted outreach at industry events and formed a relationship with the California Facilities Safe Excavation Board. However, the Board continues to receive complaints about unlicensed activity and encounter businesses with no knowledge of the state's licensing requirements.

In its 2023-24 Sunset Review Report, the Board stated the following:

The Board would like to pursue other means to improve the effectiveness of the Enforcement Unit's processing of its complaint investigations, particularly those related to unlicensed practice. While issuing an administrative citation is an effective means of disclosing unlicensed activity to the public and emphasizing the severity and gravity of such violations, it is not always effective in motivating violators to cease and desist. Many choose to pay the fines and continue to offer and practice, while others choose to ignore the administrative citation altogether. The use of the internet to advertise professional engineering, land surveying, and geologic services continues to be on the rise. Business by unlicensed individuals is often conducted solely through internet advertisements, either using broker/referral websites or individual sites for companies. Communication is often through email and mobile telephone service, and payment is made through online payment options. This process can severely hinder ability by the consumer or the Board to pursue remedies if a breach of contract or fraud occurs. Therefore, the Enforcement Unit would like to research additional means of effectively inhibiting solicitation of illegal activities. For instance, current law provides the Board, through the issuance of an administrative citation, authority to order individuals advertising professional services in telephone directories to disconnect telephone services regulated by the Public Utilities Commission (PUC). Legislation enacted in 2015 broadened this to include any advertising, not just a listing in a telephone directory. However, many unlicensed individuals operate through mobile telephone services, which are not regulated by the PUC. In addition, there is currently no authority to require violators to shut down websites illegally advertising professional services or to require the online broker/referral websites to remove the listings. The Board would like to collaborate with the online broker/referral sites to better educate their online customers and the public of possible licensure requirements, as well as easily identify and investigate those in violation of the Board's laws.

Another serious problem regarding unlicensed activity is unlicensed individuals operating engineering and land surveying businesses without having an appropriately licensed individual as an owner, partner, or officer in responsible charge. Currently, companies offering professional engineering and land surveying services are required to provide an Organization Record (OR) form, filed free of charge, which lists the licensed professional(s) in responsible charge of professional services offered and performed. During the 2022 legislative session, the Board sponsored legislation (Ch. 302, Stats.2022) that repealed a subdivision in B&P Code § 6738 and 8729 that was widely misinterpreted as allowing non-engineering and non-land surveying businesses to offer professional engineering or land surveying services as long as the business then contracted with a licensee to be in responsible charge of the work. Although this was not at all what the subdivision stated, the Board determined that the best course of action was to repeal it to prevent any future misunderstandings or misuse of the law. This change became effective January 1, 2023. Currently, there is not a requirement for geological

and geophysical companies to file an OR form, although the Geologist and Geophysicist Act does require a professional geologist or geophysicist, as appropriate, to be an owner, partner, or officer of the business and in responsible charge of the professional services offered and performed. The Board has been exploring a means to integrate certain data elements into the BPELSG Connect system that will better enable the tracking of licensees' association with engineering, land surveying, geology, and geophysics businesses offering services in California.

Additionally, the Board reports that it has met with concerned professional associations to discuss way in which they can collaborate to address unlicensed activity.

Earlier this year, the California Land Surveyors Association (CLSA) submitted a letter enumerating several recommendations to combat illegal land surveying. Those recommendations include the Board hiring more enforcement staff; increasing civil penalties; requiring land surveyors to carry professional errors and omissions liability insurance; holding unlicensed land surveyors and the entities that employ them to be held jointly and severally liable for unlicensed practice; and enhanced education and outreach for consumers. Moreover, the CLSA has indicated that licensed land surveyors would be willing to pay slightly higher fees to improve enforcement.

Staff Recommendation: *The Board should consider the merit of CLSA's recommendations and report to the Committees which, if any, it considers feasible. Moreover, the Board should identify any statutory or budgetary changes needed to enable more effective enforcement against unlicensed activity.*

ISSUE #9: *License Revocation. Should the Board be authorized to automatically revoke a license when the licensee violates the terms of probation?*

Background: When a licensee is placed on probation, their license is revoked, but the revocation is stayed by the Board. The Board imposes terms of probation, which can include requirements to take education and ethics courses, pass an examination on the Board's laws and regulations, notify clients of their disciplinary action, and pay the Board's costs for investigation and prosecution of the matter. Additionally, the terms of probation may include a period of suspension from practice. When the period of suspension concludes, the licensee must continue to abide by any other terms of their probation. However, if the licensee violates probation, the Board must file a Petition to Revoke Probation and go through the full formal discipline process.

Staff Recommendation: *The Board should share how often it must go through the full formal disciplinary process to revoke the licensee of an individual whose license has been placed on probationary status and the licensee violates the terms of probation. Additionally, the Board should consider whether having the authority to automatically revoke a license in this limited instance strikes the right balance between reducing administrative burdens and protecting due process.*

TECHNICAL CLEANUP

ISSUE #10: *Technical Cleanup. Is there a need for technical cleanup?*

Background: According to the Board, legislation enacted since the Board's prior sunset review has made various technical changes, thus limiting the amount of technical clean-up needed at present. Nonetheless, the Board has identified a handful of sections within the Business and Professions Code that should be amended.

Staff Recommendation: *The Board should continue to advise the Committees of necessary code cleanup.*

CONTINUED REGULATION OF PROFESSIONAL ENGINEERS, LAND SURVEYORS, GEOLOGISTS, AND GEOPHYSICISTS

ISSUE #11: *Continued Regulation. Should the licensing of Professional Engineers, Land Surveyors, Geologists, and Geophysicists be continued and be regulated by the Board?*

Background: The practices of engineering, land surveying, geology, and geophysics have significant health, safety, legal, and financial consequences for Californians. Indeed, the regulation of engineering and geology began after catastrophic events ruinous to human life and property. Uniform enforcement of land surveying laws became paramount following years of local jurisdictions interpreting the laws differently and legal disputes costing both the state and public millions of dollars. The Board's licensing and enforcement responsibilities are no less important today as the state endures regular extreme weather events and continues to invest significant resources in its infrastructure.

Staff Recommendation: *The Board's oversight of the Professional Engineers, Land Surveyors, Geologists, and Geophysicists should be continued, with potential reforms, and reviewed again on a future date (to be determined) to ensure that issues identified in this background paper are adequately addressed.*