



# Environmental Scan

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NOVEMBER 2021

SOLID Planning



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## Acronyms

ACEC	American Council of Engineering Companies
AEO	Assistant Executive Officer
ASCE	American Society of Civil Engineers
ASBOG	National Association of State Boards of Geology
BPELSG	Board for Professional Engineers, Land Surveyors, and Geologists
CASQA	California Stormwater Quality Association
CBT	Computer Based Testing
CLSA	California Land Surveyors Association
EIT	Engineering-In-Training
EO	Executive Officer
FS	Fundamentals of Surveying Exam
LSIT	Land Surveyor-In-Training
GIT	Geologist-In-Training
GSA	General Services Administration
NCEES	National Council of Examiners for Engineering and Surveying
PE	Professional Engineer
PLS	Professional Land Surveyor
RFQ	Request for Qualification
SME	Subject Matter Expert
STEM	Science, Technology, Engineering, and Mathematics
TAC	Technical Advisory Committee

## Introduction

One of the first steps in developing a strategic plan is to conduct a scan and analysis of the environment in which an organization operates. This analysis allows us to look at the factors that can impact the organization's success. This is a summary of the results of the environmental scan recently conducted by SOLID Planning for the Board for Professional Engineers, Land Surveyors, and Geologists (BPELSG or the Board) in the month of September.

The purpose of this environmental scan is to provide a better understanding of external stakeholder and internal stakeholder (board members and board management) thoughts about the Board's performance within the following goal areas:

- Licensing
- Applications/Examinations
- Laws and Regulations
- Enforcement
- Outreach
- Customer Service

This document outlines areas where external and internal stakeholders agree and disagree, while providing additional insight to assist the Board in developing goals and objectives for the upcoming strategic plan.

Please review this information carefully in preparation for the upcoming strategic planning session. At this planning session we will discuss and evaluate this information as a group to help identify new strategic objectives the Board will focus on during the upcoming strategic plan period.

If you have any questions about this report, please contact Sarah Irani with SOLID Planning at [sarah.irani@dca.ca.gov](mailto:sarah.irani@dca.ca.gov).



## Goal Area 1: Licensing

*The Board provides applicants and licensees a method for providing services in California to protect consumers.*

### Effectiveness Rating

The below table lists the response rate from external and internal stakeholders to the question “In your opinion, how effective is the Board in the area of Licensing?”.

	<u>External Stakeholders</u>	<u>Internal Stakeholders</u>
<b>Very Effective</b>	22%	61%
<b>Effective</b>	66%	39%
<b>Poor</b>	9%	0%
<b>Very Poor</b>	3%	0%
<b>Total %</b>	100%	100%
<b>Number of Responses</b>	342	18

### Summary of Licensing Strengths

The below describes a summary of stakeholder responses to the question “Describe the Board’s strengths, or what they do well, in the area of Licensing”. Please refer to **Appendix C** for a complete list of comments.

1. External and internal stakeholders both praise the Board for consistent and clear communication to their licensees, noting that the Board is responsive to questions from stakeholders and provides up to date information on their website.
2. External stakeholders say the high and professional standards of the Board are a strength, stating the licensing process ensures candidates are properly vetted to protect the public.
3. External and internal stakeholders state the move to the Connect System is a strength, praising the ability to complete license renewals online as seamless, fast, and user friendly.

4. External and internal stakeholders both hold board staff in high regard, saying that staff are knowledgeable, responsive, and available when external stakeholders have questions.
5. External stakeholders note the license lookup database is a strength, saying the system is frequently updated and makes it easy for the public to verify a license.

## Summary of Licensing Weaknesses

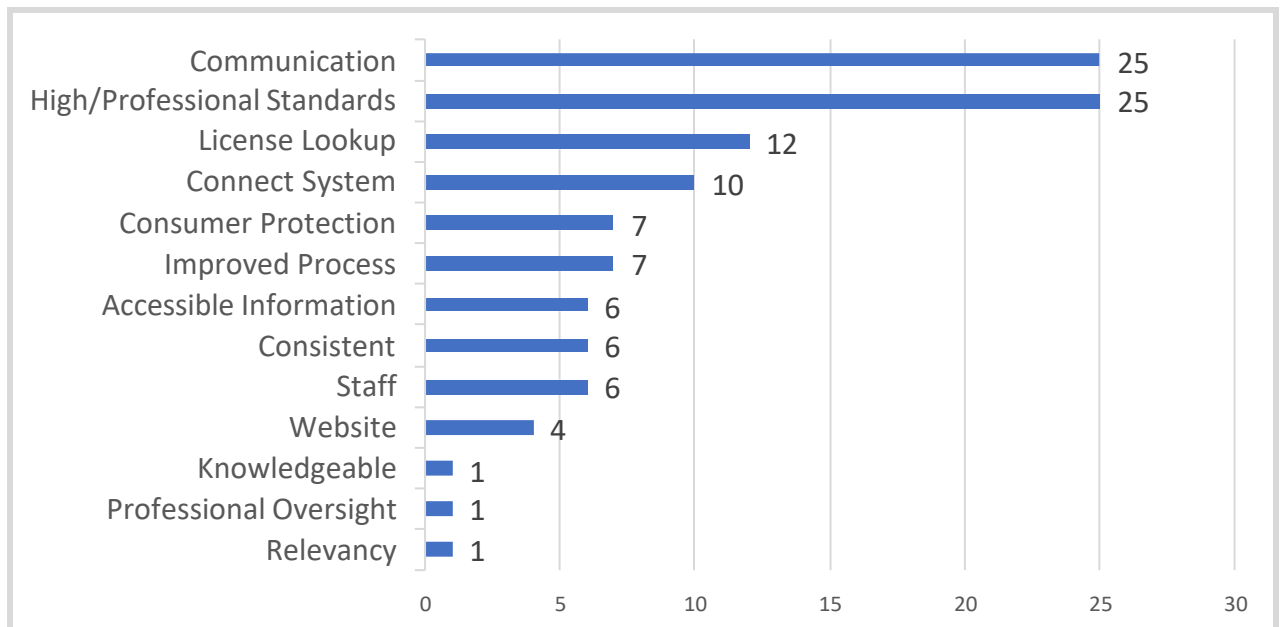
The below describes a summary of stakeholder responses to the question “Describe the Board’s weaknesses, or what they can improve on, in the area of Licensing”. Please refer to **Appendix C** for a complete list of comments.

1. External and internal stakeholders agree that communication could be improved, saying the Board could be more connected with the licensees by updating them on policy changes and getting notifications out more promptly.
2. External and internal stakeholders agree that continuing education should be a requirement for renewals, stating that licensees need to be up to date with ethics and industry changes to ensure competency.
3. Internal stakeholders state that emphasizing the value of licensure could be improved, saying that the Board should look for more communication methods, such as at the university level, to reach out to and educate individuals on how to obtain a license.
4. External and internal stakeholders would like to see more online functionality with the new Connect System as it continues to be implemented, stating that a complete online process to submit documents and pay fees online would be a benefit for staff, applicants, and licensees.

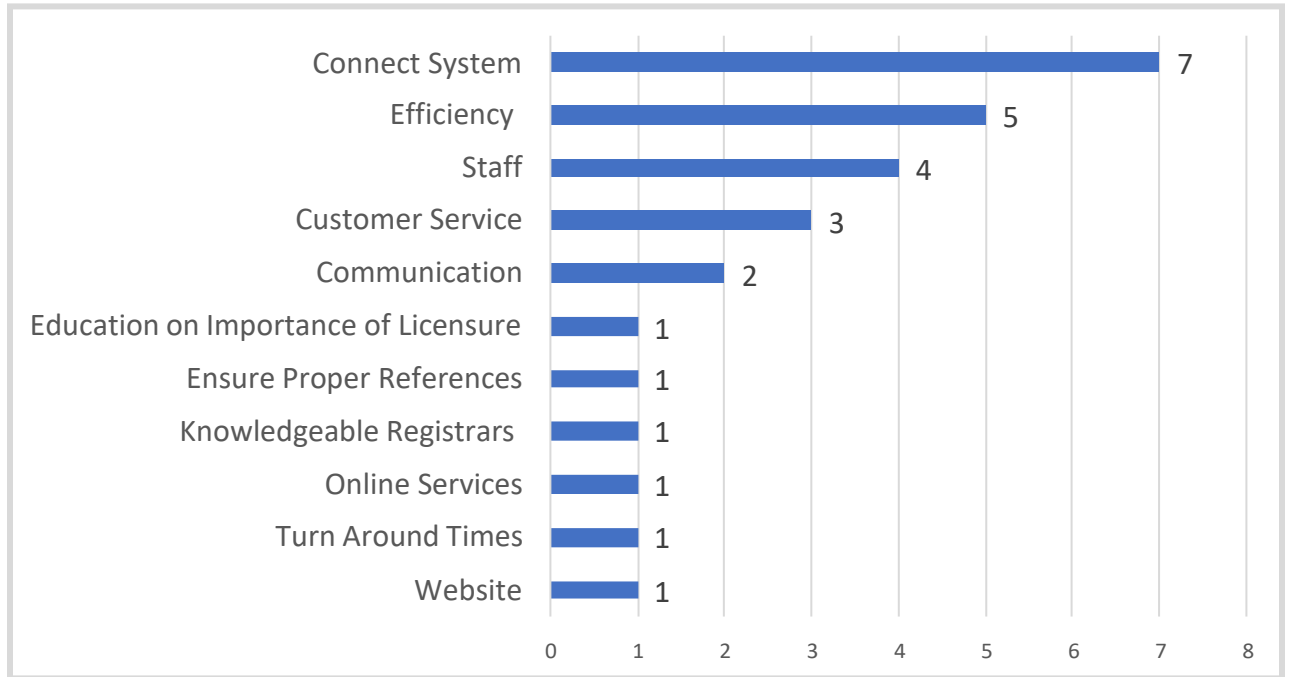
## Licensing Strengths – Trends

The bar charts below list the trends along with the corresponding number of comments to the question “Describe the Board’s strengths, or what they do well, in the area of Licensing provided by external and internal stakeholders. Refer to **Appendix C** for a complete list of categories and comments.

### External Stakeholder Comment Trends



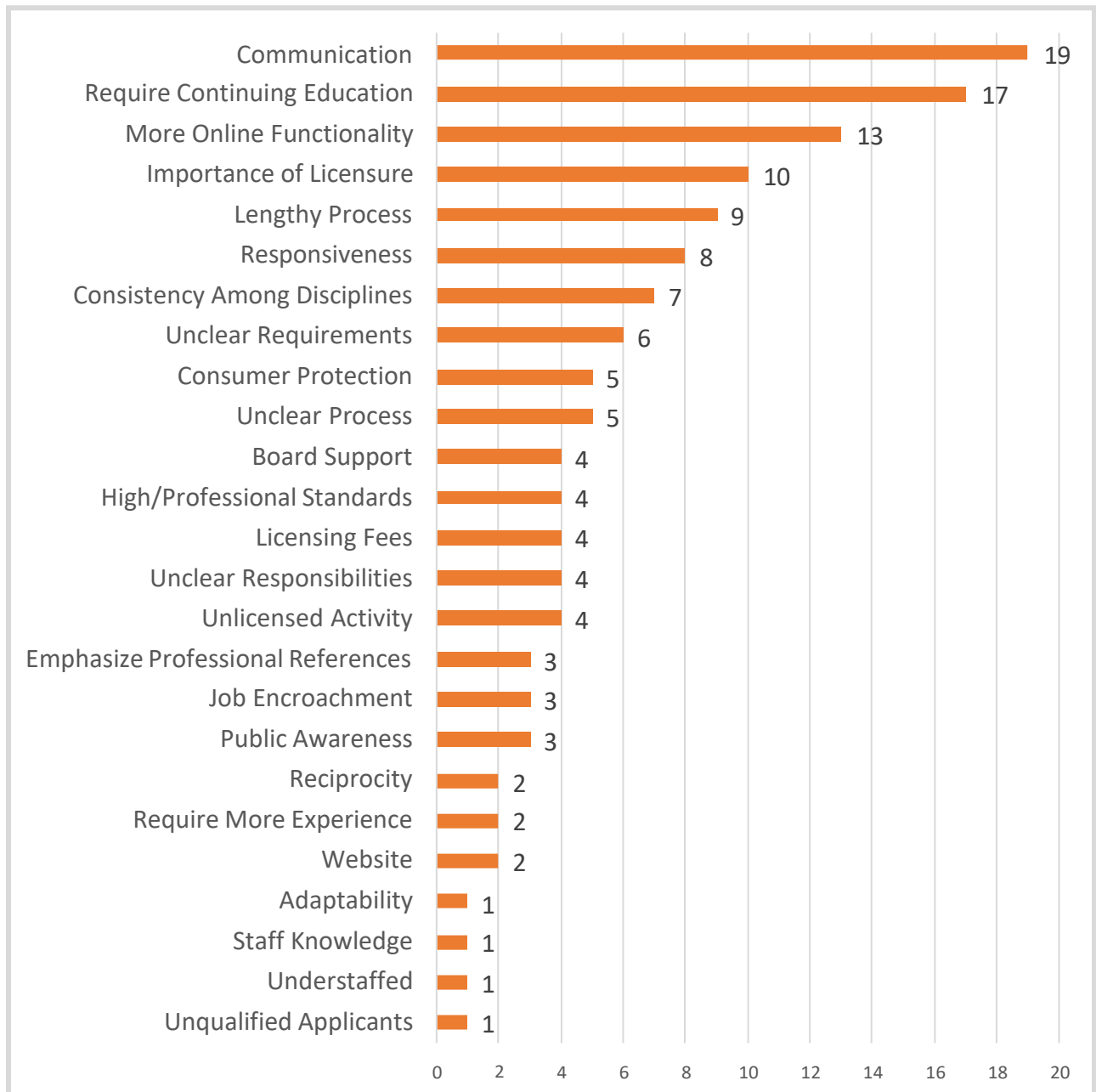
## Internal Stakeholder Comment Trends



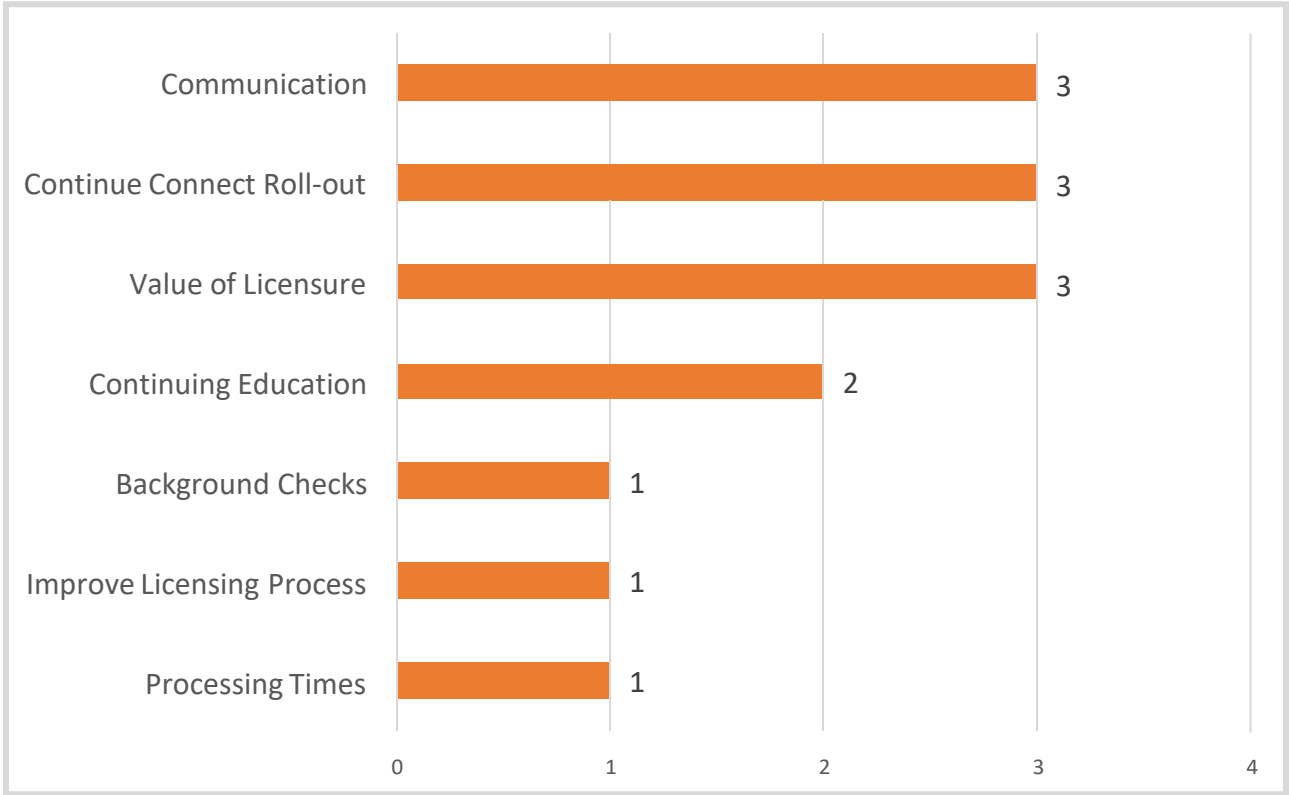
## Licensing Weaknesses – Trends

The bar charts below list the trends along with the corresponding number of comments to the question “Describe the Board’s weaknesses, or what they can improve on, in the area of Licensing” provided by external and internal stakeholders. Refer to **Appendix C** for a complete list of categories and comments.

## External Stakeholder Comment Trends



Internal Stakeholder Comment Trends



## Licensing Objective Topics Summary

The list below consolidates and categorizes objective topics recommended by the BPELSG management team and board members. Refer to **Appendix D** for a complete list of comments.

### **1. Collaboration with Industry**

- a. Work with organizations to facilitate licensing of groups.
- b. Continue to discuss and develop licensing best practices at NCEES sessions.

### **2. Continue Connect Implementation**

- a. Continue roll out of the Connect System.

### **3. Promote Value of Licensure**

- a. Communicate advantages of licensure.
- b. Communicate to stakeholders about what licensure means.

## DCA Active License Statistics

To ensure that DCA and its stakeholders can effectively execute the Department of Consumer Affairs (DCA) core mission of consumer protection, the DCA has established a transparent set of measurements to track licensing activity. The chart below shows the number and types of licenses issued during current and prior years, and year-over-year change for each category.

### Data Definitions

- **Active Licenses** - A license issued by a DCA entity that was active at any time during the period July 1 through June 30 of the year selected.
- **Renewed Licenses** - A license that was renewed by a DCA entity to a first-time licensee at any time during the period July 1 through June 30 of the year selected.
- **New Licenses** - A license issued by a DCA entity to a first-time licensee at any time during the period July 1 through June 30 of the year selected.
- **License Application** - An application for a first-time licensee received by a DCA entity at any time during the period July 1 through June 30 of the year selected.
- **State Fiscal Year (SFY)** - A 12-month state accounting period which varies from calendar year and the federal fiscal year. In California State government, the state fiscal year runs from July 1 through the following June 30.

<u>Licensing Measures</u>	<u>Change</u>	<u>SFY 2019-2020</u>	<u>SFY 2018-2019</u>
<b>Active Licenses</b>	+3,137	177,602	174,465
<b>Renewed Licenses</b>	+5,999	56,336	50,337
<b>New Licenses</b>	-1,242	5,311	6,553
<b>License Applications</b>	-4,513	6,129	10,642

The data contained in this table is compiled from the Open Data Portal<sup>1</sup> which uses monthly statistical reporting from DCA Boards and Bureaus. Open Data Portal data was last refreshed on October 5, 2020. SOLID obtained the data on October 27, 2021.

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<sup>1</sup> Source: DCA Open Data Portal: [https://www.dca.ca.gov/data/annual\\_license\\_stats.shtml](https://www.dca.ca.gov/data/annual_license_stats.shtml)



# Goal Area 2: Applications/Examinations

*The Board promotes appropriate standards so that qualified individuals may obtain licensure in order to protect the public.*

## Effectiveness Rating

The below table lists the response rate from external and internal stakeholders to the question “In your opinion, how effective is the Board in the area of Applications/Examinations?”.

	<u>External Stakeholders</u>	<u>Internal Stakeholders</u>
<b>Very Effective</b>	19%	65%
<b>Effective</b>	64%	35%
<b>Poor</b>	14%	0%
<b>Very Poor</b>	3%	0%
<b>Total %</b>	100%	100%
<b>Number of Responses</b>	309	17

## Summary of Applications/Examinations Strengths

The below describes a summary of stakeholder responses to the question “Describe the Board’s strengths, or what they do well, in the area of Applications/Examinations”. Please refer to **Appendix C** for a complete list of comments.

1. External stakeholders say that the high and professional standards of the exam are a strength, stating the exams ensure applicants are knowledgeable and competent in their fields.
2. External stakeholders believe that exams are fair and valid, saying the exams are comprehensive and cover a wide range of topics to accurately test the competency of the applicants.
3. External and internal stakeholders agree that computer-based testing (CBT) is a strength, saying CBT has allowed for easier proctoring of exams and provides flexibility in scheduling for applicants.

4. Internal stakeholders believe that staff are a great strength in the area of Applications/Examinations, stating that the staff are knowledgeable and very communicative with the test vendor and applicants.
5. Internal stakeholders say that the Connect System has made a huge improvement in the application process, allowing for applicants to submit their applications online and reducing staff workload.

## Summary of Applications/Examinations Weaknesses

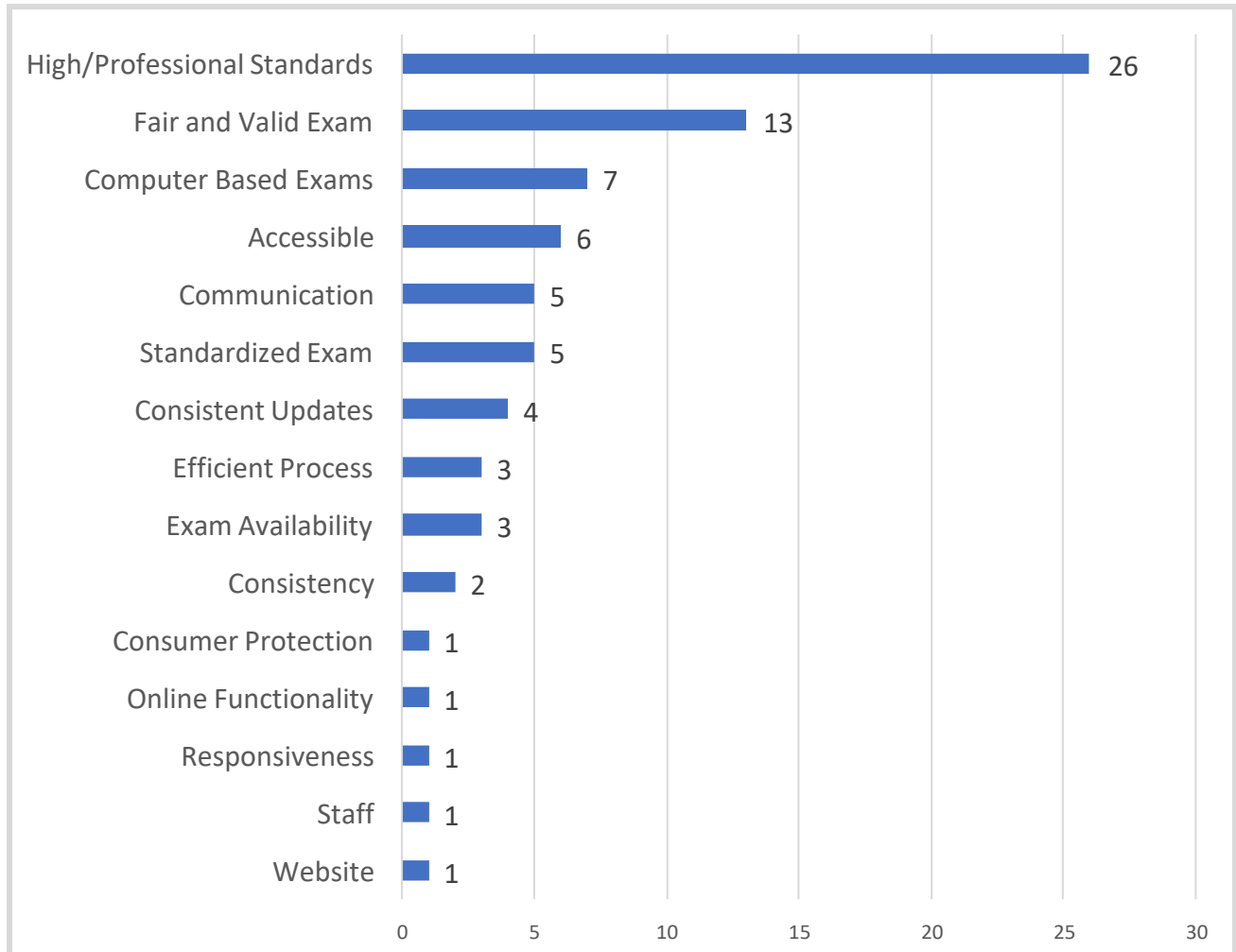
The below describes a summary of stakeholder responses to the question “Describe the Board’s weaknesses, or what they can improve on, in the area of Applications/Examinations”. Please refer to **Appendix C** for a complete list of comments.

1. External stakeholders say that the exam content is a weakness, stating that the content of the exams does not cover current topics and is less skills focused.
2. External stakeholders show a concern with applicant competency, saying the exams do not accurately measure the knowledge of the candidates.
3. Both external and internal stakeholders agree that communication could be improved in the area of Applications/Examinations, citing difficulties communicating between the applicant, board staff, and the exam vendor to get exams scheduled and confirm status of applications.
4. Internal stakeholders believe that the continuation of the Connect System will help improve performance in the area of Applications/Examinations, saying organization and file management will help streamline the application process for all license types.
5. Internal stakeholders say that exam availability could be improved, noting that many exams had to be cancelled during the pandemic.

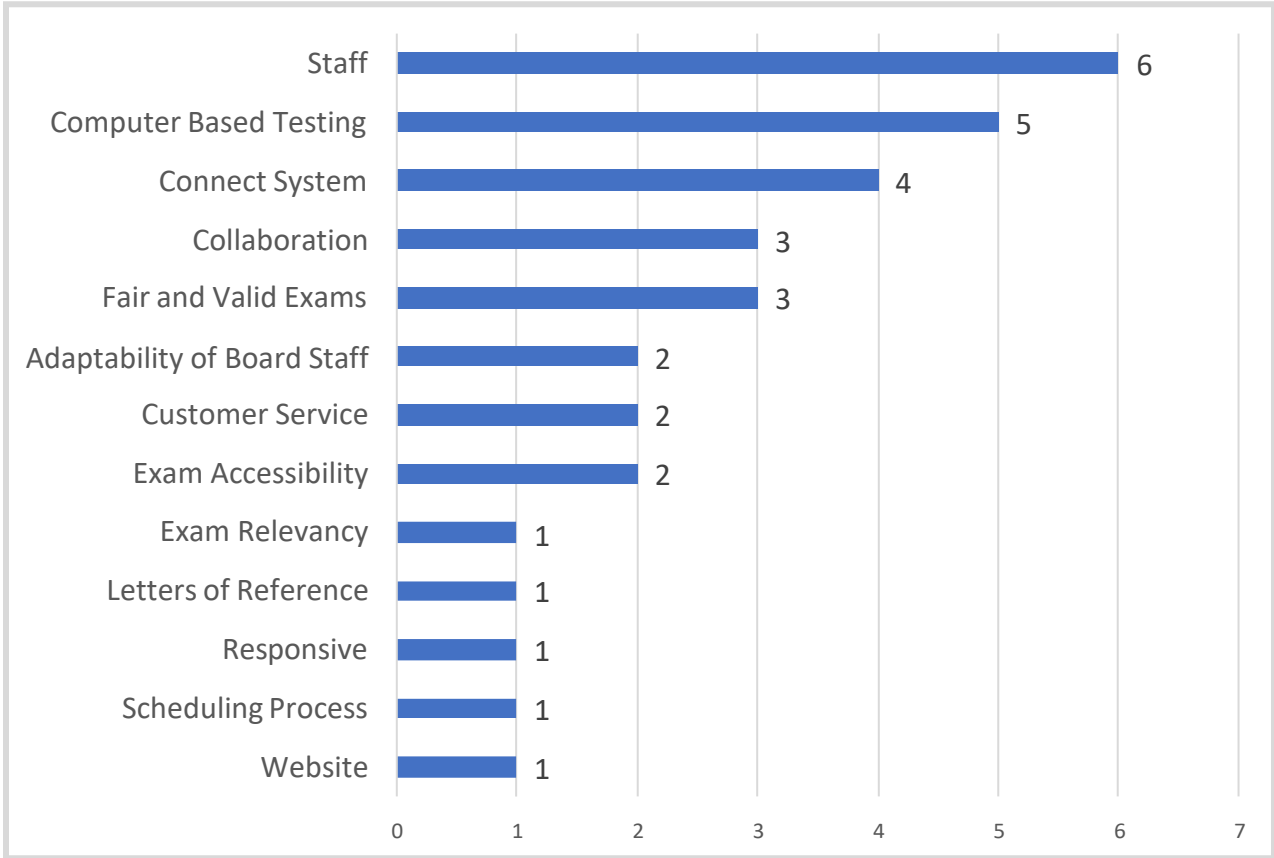
## Applications/Examinations Strengths – Trends

The bar charts below list the trends along with the corresponding number of comments for feedback provided by external and internal stakeholders. Refer to **Appendix C** for a complete list of categories and comments.

### External Stakeholder Comment Trends



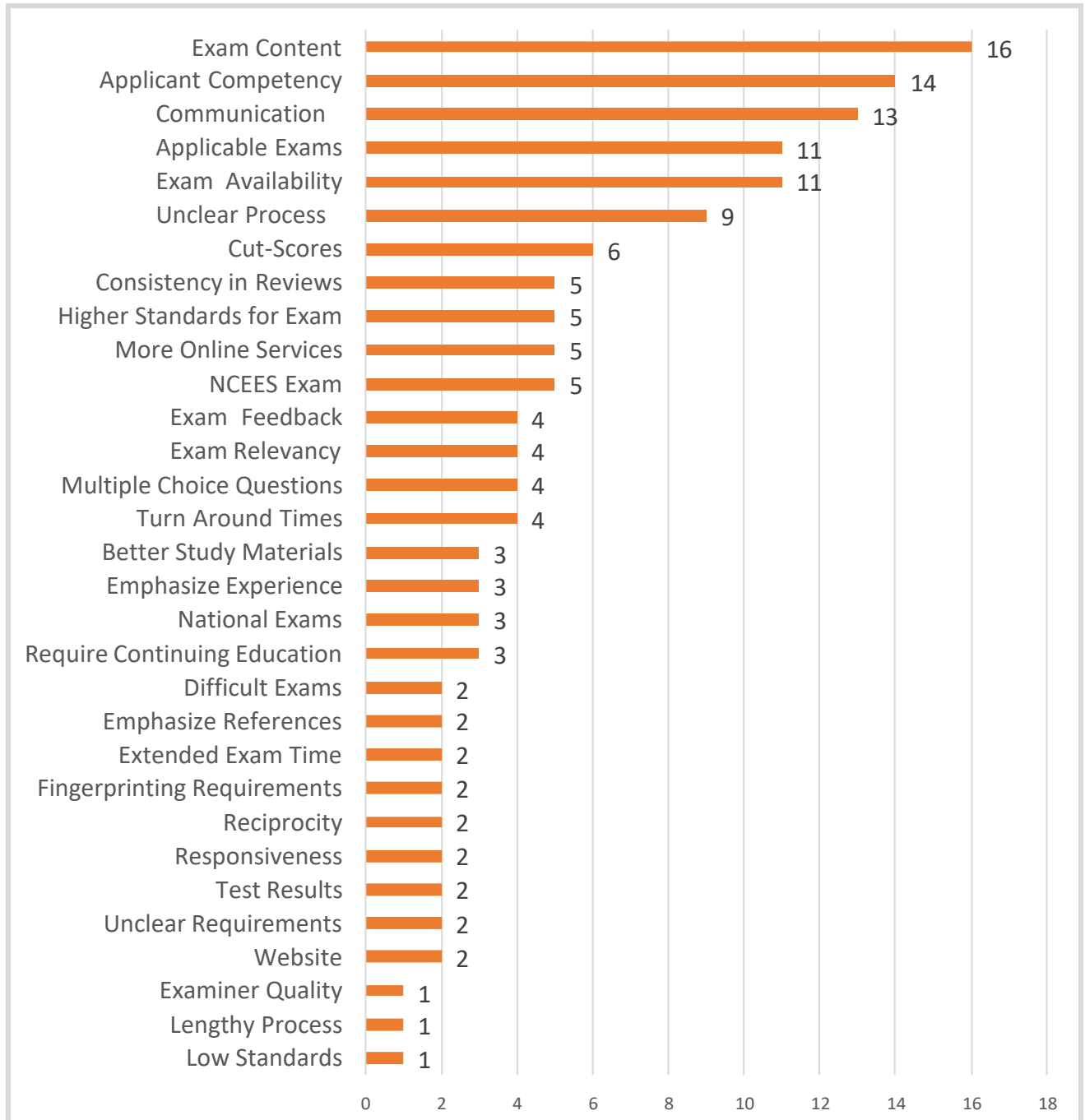
# Internal Stakeholder Comment Trends



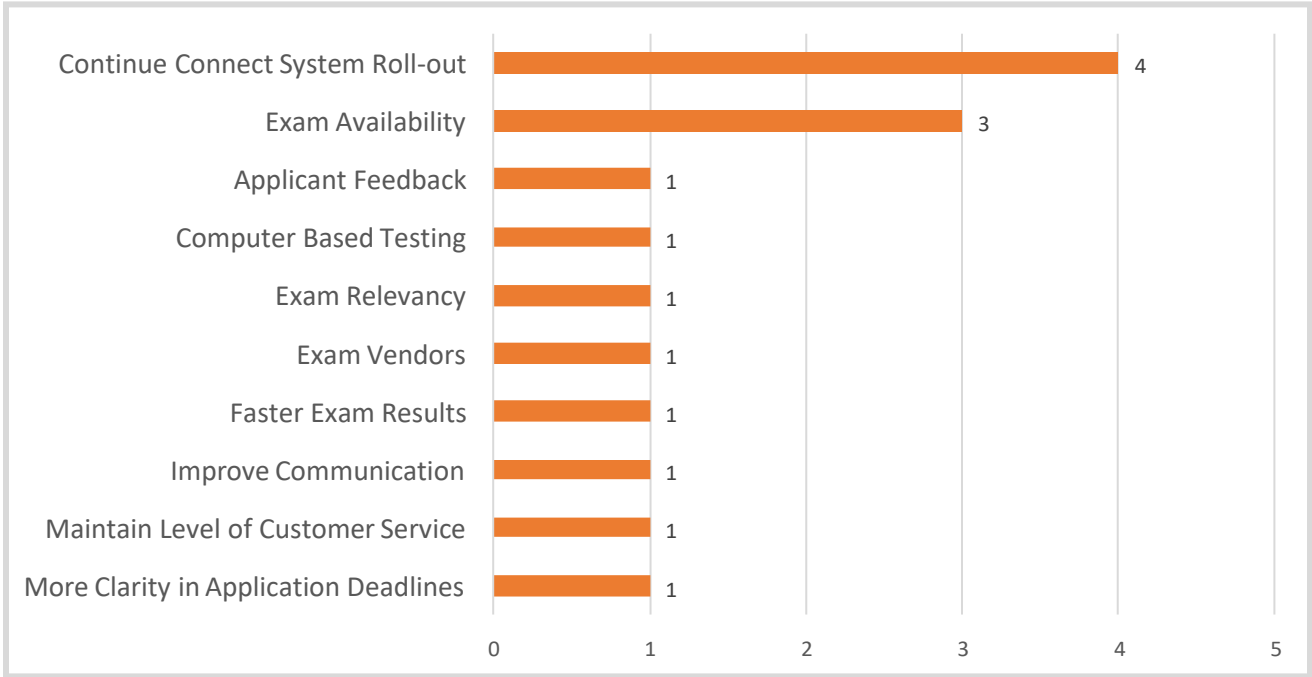
## Applications/Examinations Weaknesses – Trends

The bar charts below list the trends along with the corresponding number of comments for feedback provided by external and internal stakeholders. Refer to **Appendix C** for a complete list of categories and comments.

### External Stakeholder Comment Trends



# Internal Stakeholder Comment Trends



## Applications/Examinations Objective Topics Summary

The list below consolidates and categorizes objective topics recommended by the BPELSG management team and board members. Refer to **Appendix D** for a complete list of comments.

### **1. Continue Connect Roll-Out**

- a. Continue development of new system to have all license types able to apply online to speed up process for people to get licensed.
- b. Transition to Connect System and determine how to re-align staff with the change in day-to-day work.

### **2. Ensure Continuation of Exams**

- a. Ensure the applicants are able to take their exams in light of the pandemic.

### **3. Seek Feedback**

- a. Seek input from applicants on the application process as it's coming online.
- b. Ask for applicant feedback after application.

# Goal Area 3: Laws and Regulations

The Board ensures that statutes, regulations, policies, and procedures strengthen and support its mandate and mission.

## Effectiveness Rating

The below table lists the response rate from external and internal stakeholders to the question “In your opinion, how effective is the Board in the area of Laws and Regulations?”.

	<u>External Stakeholders</u>	<u>Internal Stakeholders</u>
<b>Very Effective</b>	18%	61%
<b>Effective</b>	62%	33%
<b>Poor</b>	16%	6%
<b>Very Poor</b>	4%	0%
<b>Total %</b>	100%	100%
<b>Number of Responses</b>	290	18

## Summary of Laws and Regulations Strengths

The below describes a summary of stakeholder responses to the question “Describe the Board’s strengths, or what they do well, in the area of Laws and Regulations”. Please refer to **Appendix C** for a complete list of comments.

1. External stakeholders praise the Board’s ability to evaluate laws and regulations, saying the Board provides relevant review and comments of proposed legislation that will impact the professions.
2. Internal stakeholders say the board staff are extremely knowledgeable in laws and regulations, stating staff are excellent at identifying the impact of proposed changes and clearly explaining those impacts to licensees and members of the public.
3. External stakeholders feel that the Board does a great job in keeping licensees informed on proposed or upcoming changes, saying that the information is always readily available on the Board’s website.



4. Internal stakeholders say that the Board has a good relationship with legislators, stating that the Board collaborates well with legislative staff to ensure wording is clear and appropriate for all the professions.

## Summary of Laws and Regulations Weaknesses

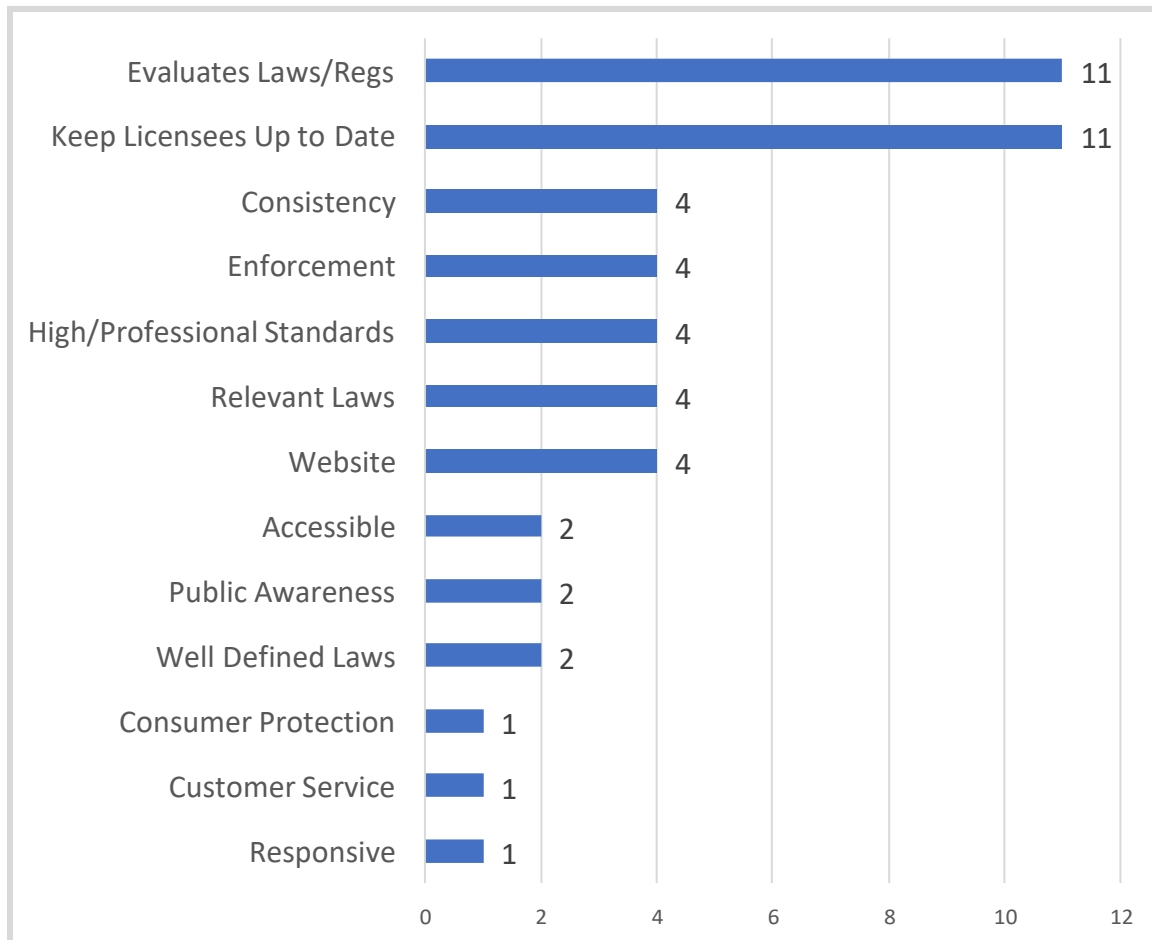
The below describes a summary of stakeholder responses to the question “Describe the Board’s weaknesses, or what they can improve on, in the area of Laws and Regulations”. Please refer to **Appendix C** for a complete list of comments.

1. External stakeholders believe that the Board could improve communication concerning laws and regulations, saying that not all licensees are updated on changing rules and regulations.
2. External stakeholders say the Board could strengthen its efforts against unlicensed practice, saying more needs to be done to deter individuals from practicing the professions without a license.
3. Internal stakeholders would like to see a decrease in the timelines for developing regulation packages and the rulemaking process.
4. Internal stakeholders believe the Board needs to implement succession planning for the laws and regulations unit, citing concerns that if senior staff were to retire it would create a vacuum of knowledge and expertise.

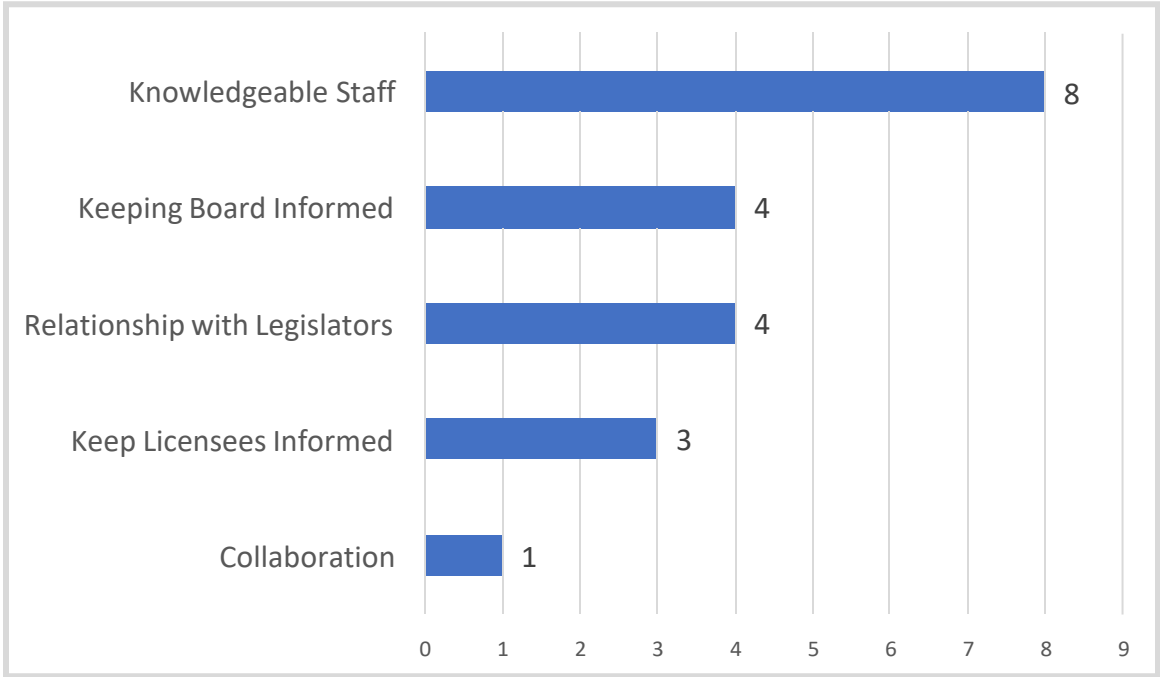
## Laws and Regulations Strengths – Trends

The bar charts below list the trends along with the corresponding number of comments for feedback provided by external and internal stakeholders. Refer to **Appendix C** for a complete list of categories and comments.

### External Stakeholder Comment Trends



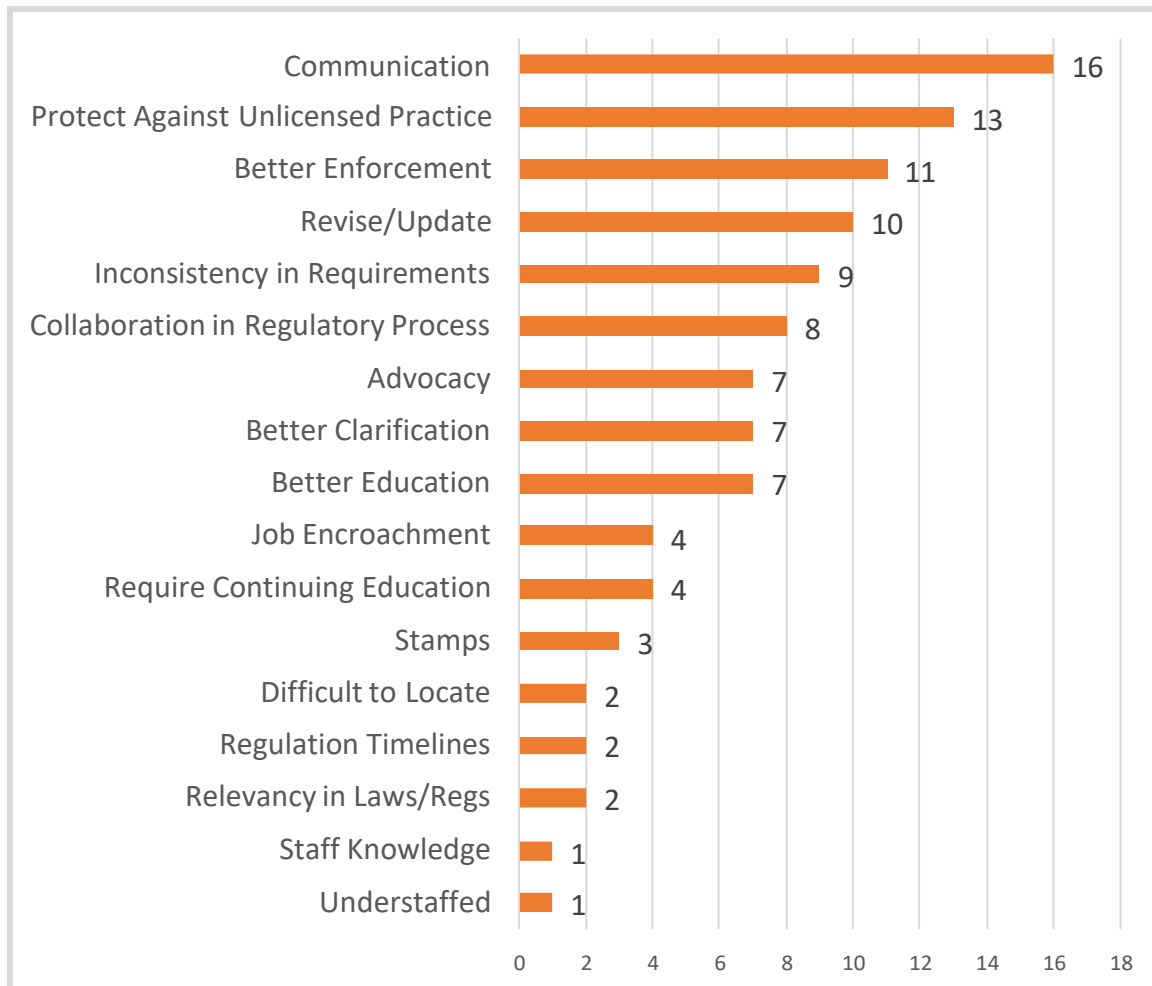
Internal Stakeholder Comment Trends



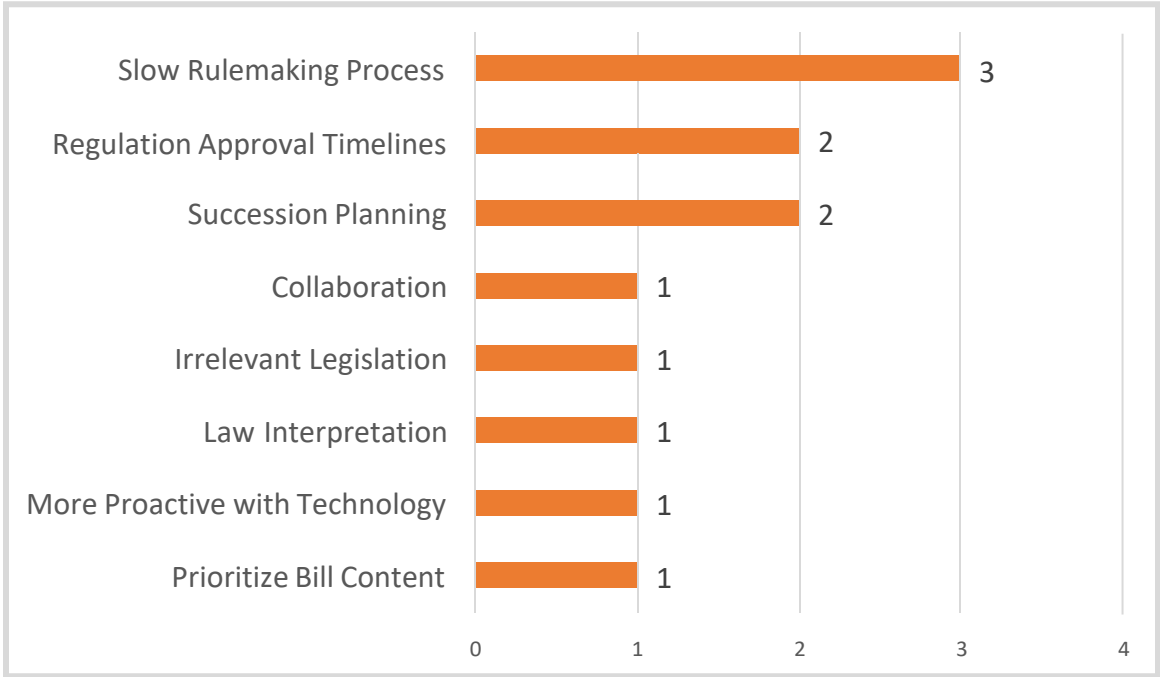
## Laws and Regulations Weaknesses – Trends

The bar charts below list the trends along with the corresponding number of comments for feedback provided by external and internal stakeholders. Refer to **Appendix C** for a complete list of categories and comments.

### External Stakeholder Comment Trends



# Internal Stakeholder Comment Trends



## Laws and Regulations Objective Topics Summary

The list below consolidates and categorizes objective topics recommended by the BPELSG management team and board members. Refer to **Appendix D** for a complete list of comments.

### **1. Succession Planning**

- a. Ensure succession plan is in place to pass on knowledge and expertise.

### **2. Expedite Rulemaking Process**

- a. Find ways to shorten processing time to regulation changes.
- b. Continue working with DCA to develop ways to expedite approval of Board proposed regulations.

### **3. Be Proactive**

- a. Anticipate laws and regulations that may be brought forward by the Board.

# Goal Area 4: Enforcement

*The Board protects the health and safety of consumers through the enforcement of the laws and regulations governing the practices of engineering, land surveying, geology, and geophysics.*

## Effectiveness Rating

The below table lists the response rate from external and internal stakeholders to the question “In your opinion, how effective is the Board in the area of Enforcement?”.

	<u>External Stakeholders</u>	<u>Internal Stakeholders</u>
<b>Very Effective</b>	16%	47%
<b>Effective</b>	56%	41%
<b>Poor</b>	20%	12%
<b>Very Poor</b>	8%	0%
<b>Total %</b>	100%	100%
<b>Number of Responses</b>	284	17

## Summary of Enforcement Strengths

The below describes a summary of stakeholder responses to the question “Describe the Board’s strengths, or what they do well, in the area of Enforcement”. Please refer to **Appendix C** for a complete list of comments.

1. External stakeholders believe that enforcement actions are fair, stating the Board takes complaints seriously and provides fair judgement to deter future occurrence.
2. External and internal stakeholders cite staff as a strength in the area of enforcement, saying board staff are knowledgeable and have greatly reduced the completion time of cases.
3. External stakeholders say the Board is effective at communication, noting that the Board provides good information on violations and respond to complaints in a timely manner.
4. Internal stakeholders say the reduction in case timelines is a strength, stating the Board has made huge strides in improving time cycles and resolving investigations quickly.

## Summary of Enforcement Weaknesses

The below describes a summary of stakeholder responses to the question “Describe the Board’s weaknesses, or what they can improve on, in the area of Enforcement”. Please refer to **Appendix C** for a complete list of comments.

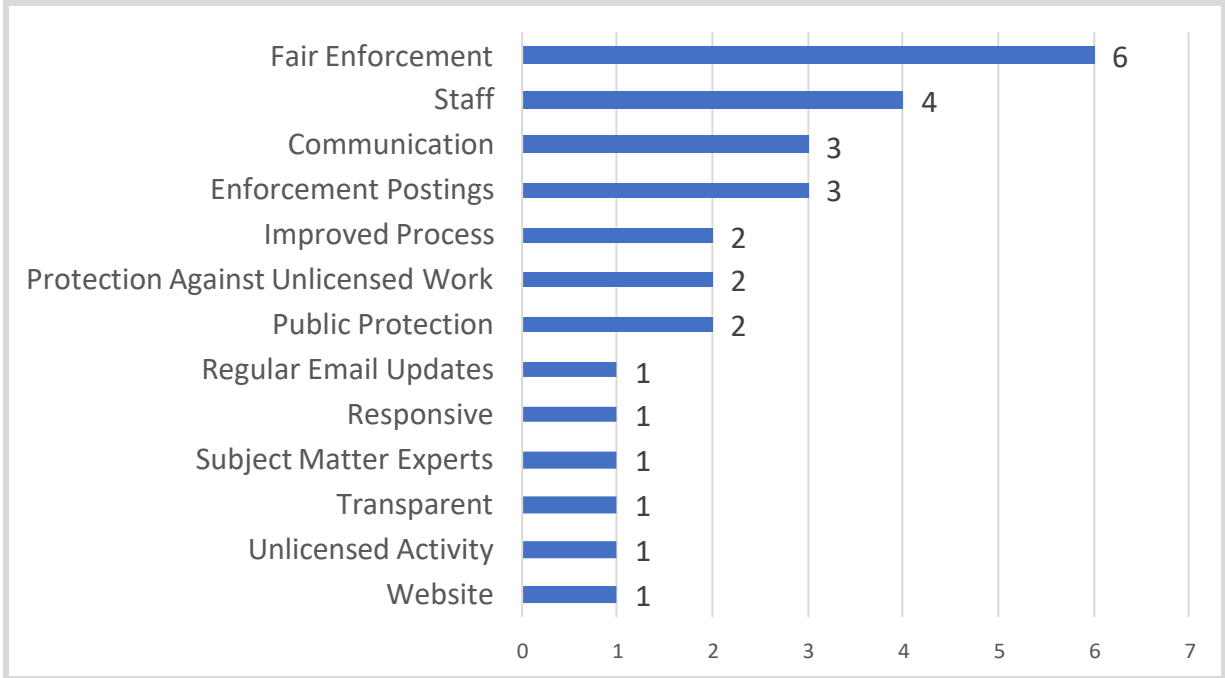
1. Both external and internal stakeholders believe enforcement is not effective enough, stating that the penalties and fines for repeat violators are too low to act as a deterrent, especially for individuals who are unlicensed.
2. Both external and internal stakeholders would like to see enforcement against unlicensed activity be improved, saying that the Board should investigate and fine these individuals to protect the professions and the public.
3. External stakeholders cite process timelines as a weakness in enforcement, stating that the complaint process from start to finish is inefficient and takes too long to resolve.
4. External and internal stakeholders believe that the quality of Subject Matter Experts who review the cases could be improved, stating the difficulty in recruiting adequate Subject Matter Experts may be due to the low pay.
5. Internal stakeholders believe that education to licensees of the enforcement process and common violations could improve, stating that licensees need a clear understanding of what requirements to abide by when practicing in California.



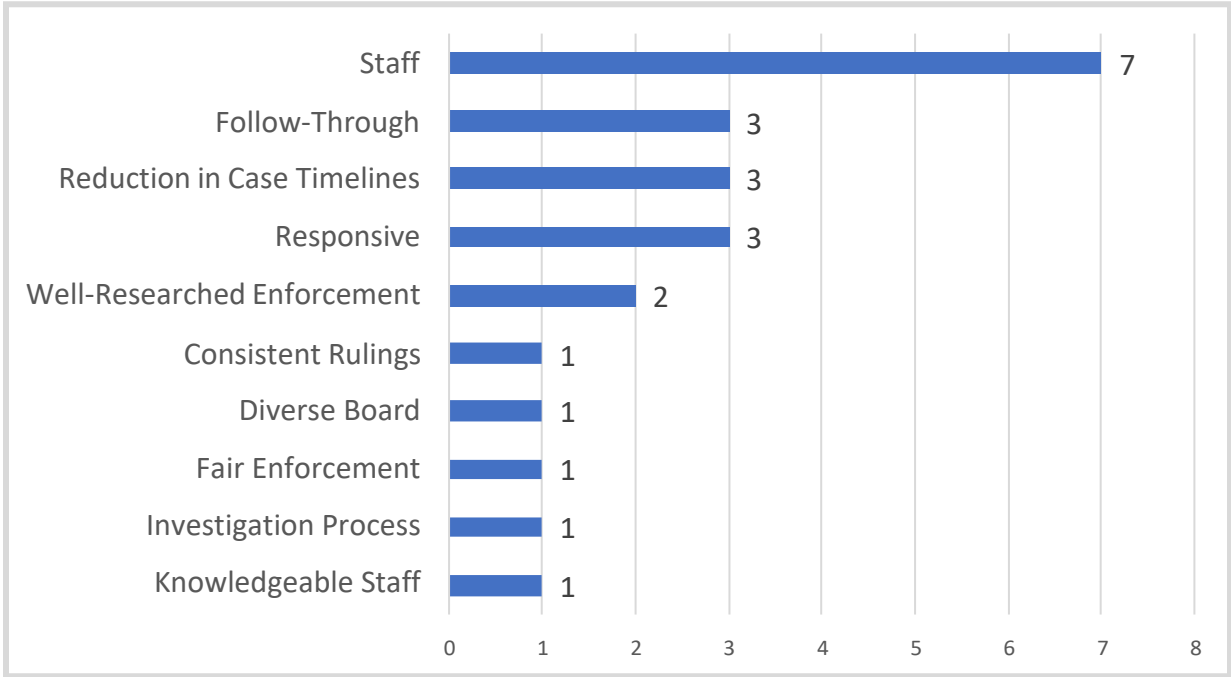
# Enforcement Strengths – Trends

The bar charts below list the trends along with the corresponding number of comments for feedback provided by external and internal stakeholders. Refer to **Appendix C** for a complete list of categories and comments.

## External Stakeholder Comment Trends



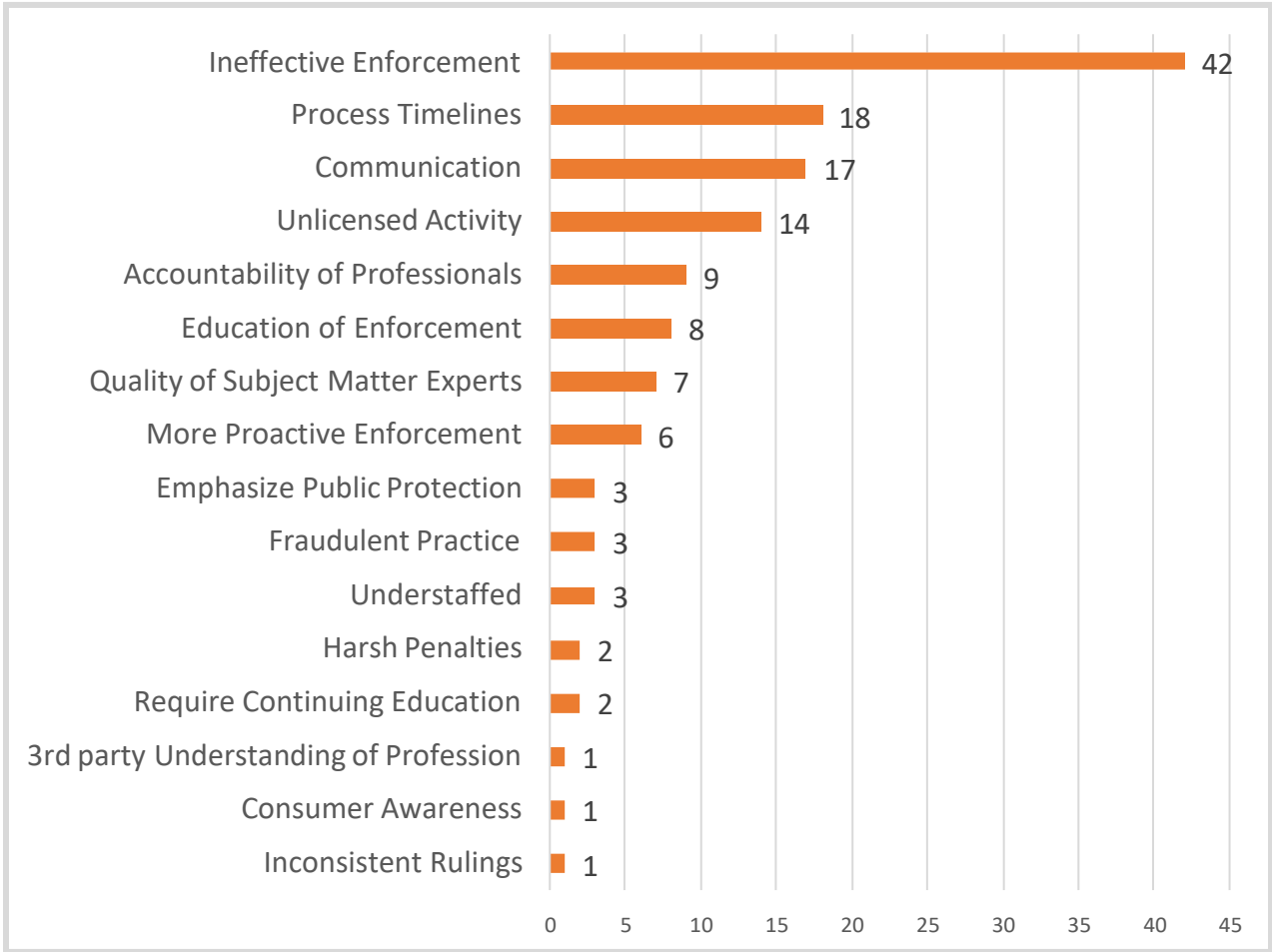
# Internal Stakeholder Comment Trends



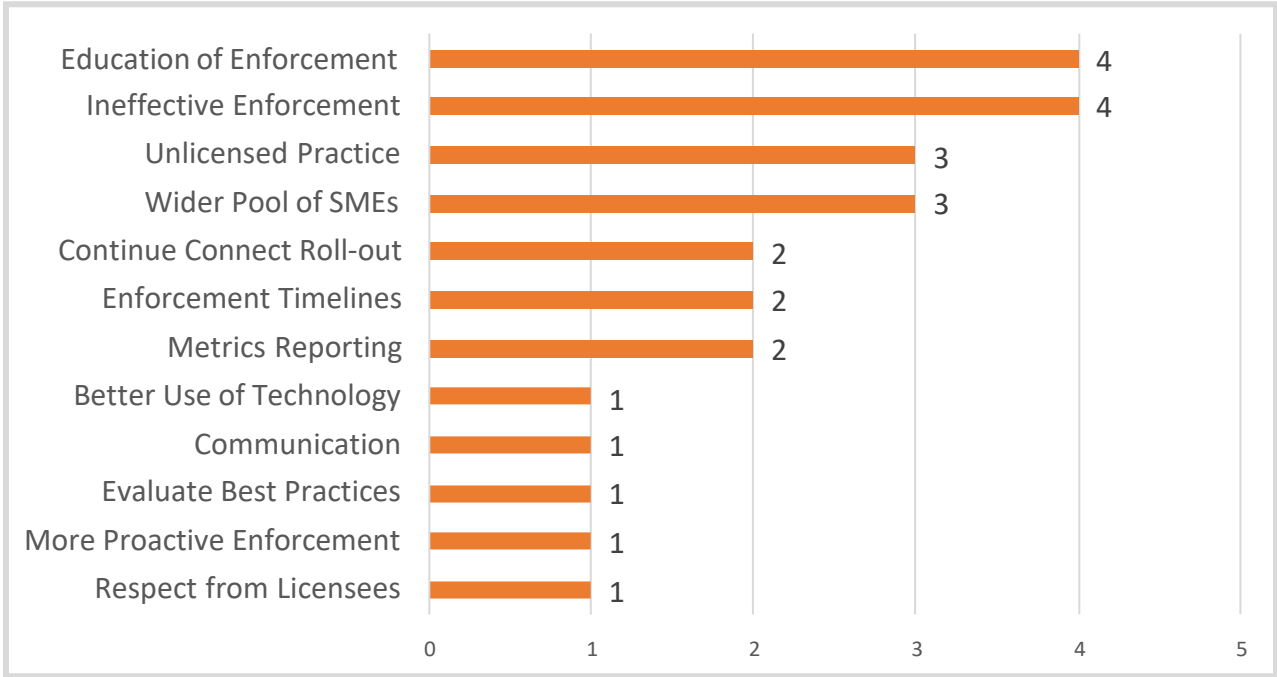
# Enforcement Weaknesses – Trends

The bar charts below list the trends along with the corresponding number of comments for feedback provided by external and internal stakeholders. Refer to **Appendix C** for a complete list of categories and comments.

## External Stakeholder Comment Trends



Internal Stakeholder Comment Trends



## Enforcement Objective Topics Summary

The list below consolidates and categorizes objective topics recommended by the BPELSG management team and board members. Refer to **Appendix D** for a complete list of comments.

### **1. Enforce Against Unlicensed Activity**

- a. Track technological developments that may facilitate unlicensed practice and publicize to related professions and regulatory reviewers.
- b. Review possibility of legislation that would make unlicensed activity more of a deterrent.

### **2. Improve Quality of Subject Matter Experts**

- a. Change regulations to increase professional SME pay.
- b. Increase pools of experts.

### **3. Minimize Case Timelines**

- a. Reduce or minimize the number of cases that take an exceptionally long time to resolve.
- b. Identify ways to maintain and improve timelines in investigation process.

# DCA Enforcement Performance Measures Summary

The performance measures demonstrate the DCA is making the most efficient and effective use of resources. Performance measures are linked directly to an agency's mission, vision, strategic objectives, and strategic initiatives. The chart below shows the number of days between the stages of investigating a consumer complaint for the Board. The column labeled “target” is the goal the Board has established for itself. The remaining columns show the actual number of days to move a complaint from one step of the investigation process to the next.

## Data Definitions

- **Complaint Volume (Intake Volume)** - Total number of complaints and conviction/arrest notices received within the specified period.
- **Complaint Intake (Intake Cycle Time)** - Average cycle time from complaint receipt to the date the complaint was assigned to an investigator.
- **Investigation (Investigation Cycle Time)** - Average cycle time from complaint receipt to closure of the investigation process. Does not include cases sent to the Attorney General or other forms of formal discipline.
- **Formal Discipline (Formal Discipline Cycle Time)** - Average number of days to complete the entire enforcement process for cases resulting in formal discipline. (Includes intake and investigation by the Board/Bureau and prosecution by the Attorney General.)
- **Probation Intake** - Average number of days from monitor assignment to the date the monitor makes first contact with the probationer.
- **Probation Violation Response** - Average number of days from the date a violation of probation is reported to the date the assigned monitor starts appropriate action.
- **State Fiscal Year (SFY)** - A 12-month state accounting period which varies from calendar year and the federal fiscal year. In California State government, the state fiscal year runs from July 1 through the following June 30.

Enforcement Performance Measures	Target	Q4 SFY 2021	Q3 SFY 2021
Complaint Volume	n/a	124	110
Complaint Intake (days)	10	5	5
Investigation (days)	360	261	251
Formal Discipline (days)	540	505	640
Probation Intake (days)	10	4	7
Probation Violation Response (days)	10	1	1

The data contained in this table is compiled from the Open Data Portal<sup>2</sup> which uses monthly statistical reporting from DCA Boards and Bureaus. Open Data Portal data was last refreshed on October 1, 2021. SOLID obtained the data on November 5, 2021

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<sup>2</sup> Source: DCA Open Data Portal: <https://www.dca.ca.gov/data/enforcement.shtml>

# Goal Area 5: Outreach

*The Board promotes the importance of licensing in an effort to regularly and consistently educate consumers, licensees, and stakeholders about the practice and regulation of the professions.*

## Effectiveness Rating

The below table lists the response rate from external and internal stakeholders to the question “In your opinion, how effective is the Board in the area of Outreach?”.

	<u>External Stakeholders</u>	<u>Internal Stakeholders</u>
<b>Very Effective</b>	12%	17%
<b>Effective</b>	47%	78%
<b>Poor</b>	35%	5%
<b>Very Poor</b>	6%	0%
<b>Total %</b>	100%	100%
<b>Number of Responses</b>	278	18

## Summary of Outreach Strengths

The below describes a summary of stakeholder responses to the question “Describe the Board’s strengths, or what they do well, in the area of Outreach”. Please refer to **Appendix C** for a complete list of comments.

1. Both external and internal stakeholders cite the Board’s outreach to universities and colleges as a strength, saying the Board conducts great presentations to students on the professions.
2. External stakeholders believe that the Board’s email program is an effective form of outreach, stating that the regular updates keep individuals informed of the Board’s activities.



3. External stakeholders believe that the Board does a great job at promoting the professions by providing presentations to different professional organizations, schools, and consumers.
4. Internal stakeholders cite staff as a strength for outreach, saying the senior registrars are very willing to reach out to stakeholders and promote licensure.
5. Internal stakeholders believe the Board's social media presence is a strength, noting that the Board has taken advantage of maintaining a presence on social media platforms.

## Summary of Outreach Weaknesses

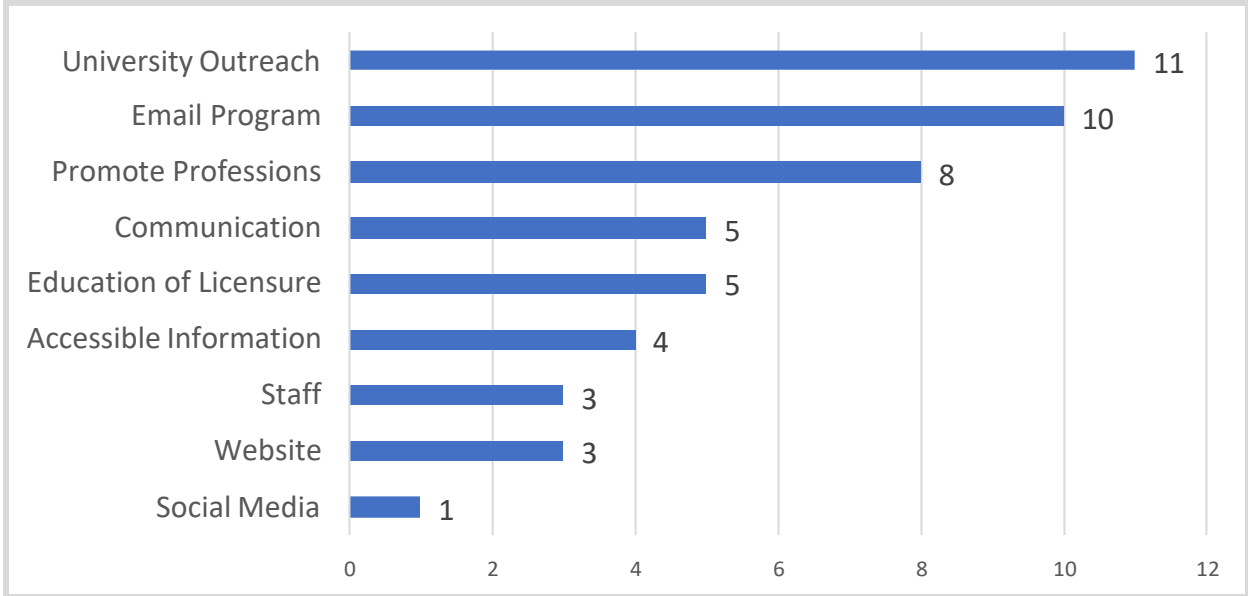
The below describes a summary of stakeholder responses to the question "Describe the Board's weaknesses, or what they can improve on, in the area of Outreach". Please refer to **Appendix C** for a complete list of comments.

1. External stakeholders believe that the Board's outreach could be more effective, stating that many stakeholders are unaware of outreach efforts and the Board could more effectively utilize virtual platforms for outreach.
2. External stakeholders would like to see an improvement of public awareness of the Board and the professions the Board regulates. External stakeholders say average consumers are unaware of the importance of the Board to the practice and regulation of the professions.
3. Both external and internal stakeholders believe that educational outreach could be improved, saying they would like to see more focused outreach educating licensees on requirements and regulations for practice in the professions.
4. External and internal stakeholders believe that the Board's social media presence could be increased, suggesting additional platforms to promote awareness to consumers and licensees.

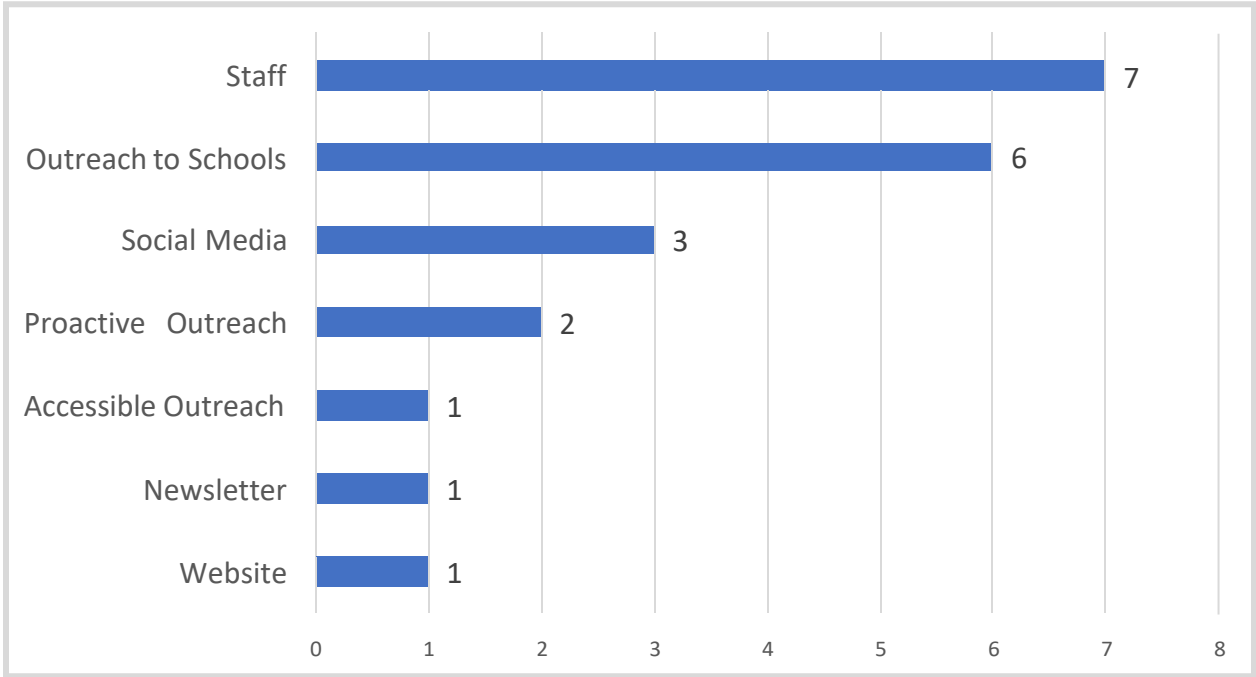
# Outreach Strengths – Trends

The bar charts below list the trends along with the corresponding number of comments for feedback provided by external and internal stakeholders. Refer to **Appendix C** for a complete list of categories and comments.

## External Stakeholder Comment Trends



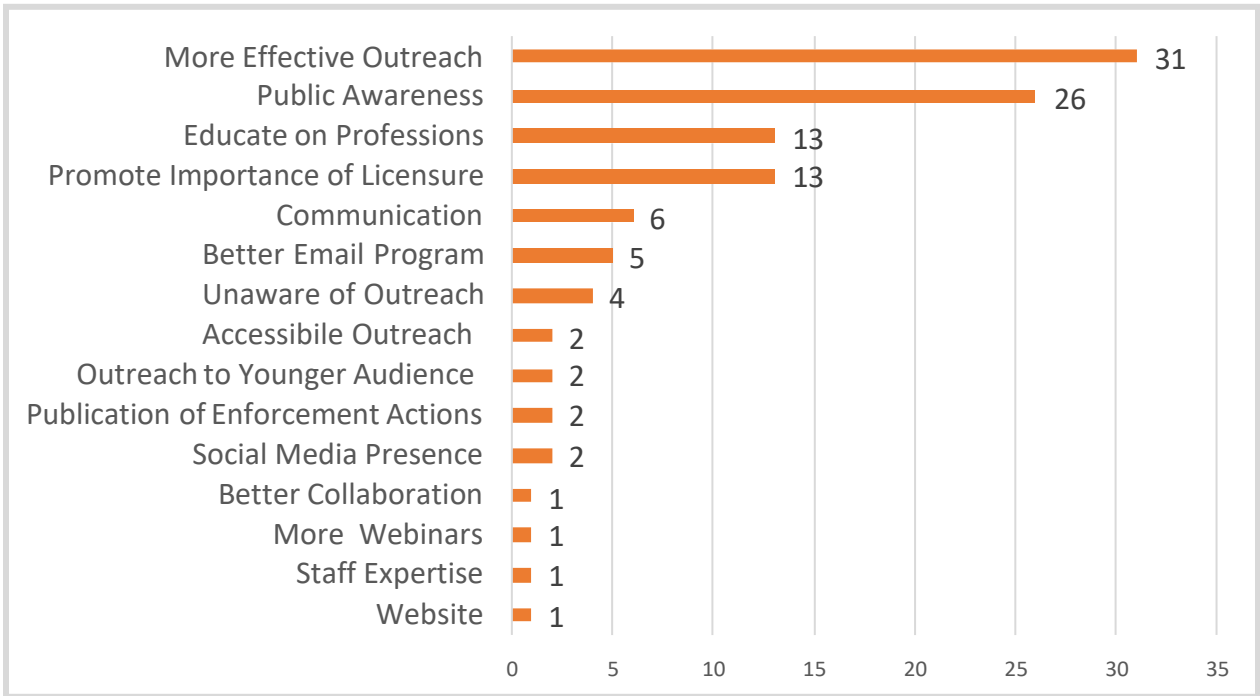
Internal Stakeholder Comment Trends



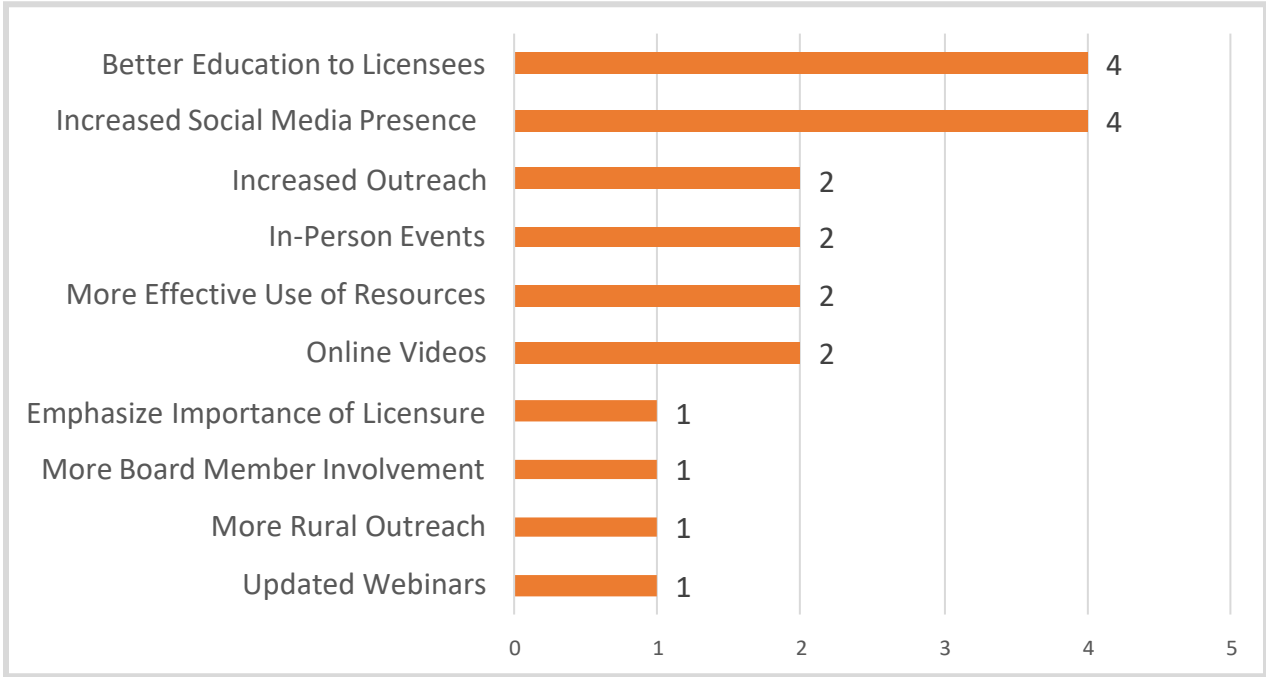
# Outreach Weaknesses – Trends

The bar charts below list the trends along with the corresponding number of comments for feedback provided by external and internal stakeholders. Refer to **Appendix C** for a complete list of categories and comments.

## External Stakeholder Comment Trends



Internal Stakeholder Comment Trends



## Outreach Objective Topics Summary

The list below consolidates and categorizes objective topics recommended by the BPELSG management team and board members. Refer to **Appendix D** for a complete list of comments.

### **1. Improve Public Awareness**

- a. Explore improving outreach to the general public on member license status.
- b. Outreach to agencies and update the publication to agencies relating to the Board's practices.
- c. Raise more awareness to the importance of licensure.

### **2. Increase Social Media Presence**

- a. Find different ways to get the Board's presence out there, perhaps on social media.
- b. Keep social media updated when Connect System is available.

# Goal Area 6: Customer Service

The Board strives to enhance organizational effectiveness and improve the quality of its services.

## Effectiveness Rating

The below table lists the response rate from external and internal stakeholders to the question “In your opinion, how effective is the Board in the area of Customer Service?”.

	<u>External Stakeholders</u>	<u>Internal Stakeholders</u>
<b>Very Effective</b>	18%	47%
<b>Effective</b>	59%	53%
<b>Poor</b>	17%	0%
<b>Very Poor</b>	6%	0%
<b>Total %</b>	100%	100%
<b>Number of Responses</b>	278	17

## Summary of Customer Service Strengths

The below describes a summary of stakeholder responses to the question “Describe the Board’s strengths, or what they do well, in the area of Customer Service”. Please refer to **Appendix C** for a complete list of comments.

1. External and internal stakeholders feel that the Board is very responsive when the public or licensees have questions, saying the Board staff are prompt and timely in their responses.
2. Both external and internal stakeholders praise staff in the area of customer service, saying that Board staff are cooperative, supportive, and engaged with helping both licensees and the public.
3. External stakeholders cite the renewal process as a strength for customer service, saying the process to renew their licensees has improved and is now easier and more efficient.

4. Both external and internal stakeholders praise the Board’s website, saying the Board does a great job providing the latest information and data on the Board’s website.

## Summary of Customer Service Weaknesses

The below describes a summary of stakeholder responses to the question “Describe the Board’s weaknesses, or what they can improve on, in the area of Customer Service”. Please refer to **Appendix C** for a complete list of comments.

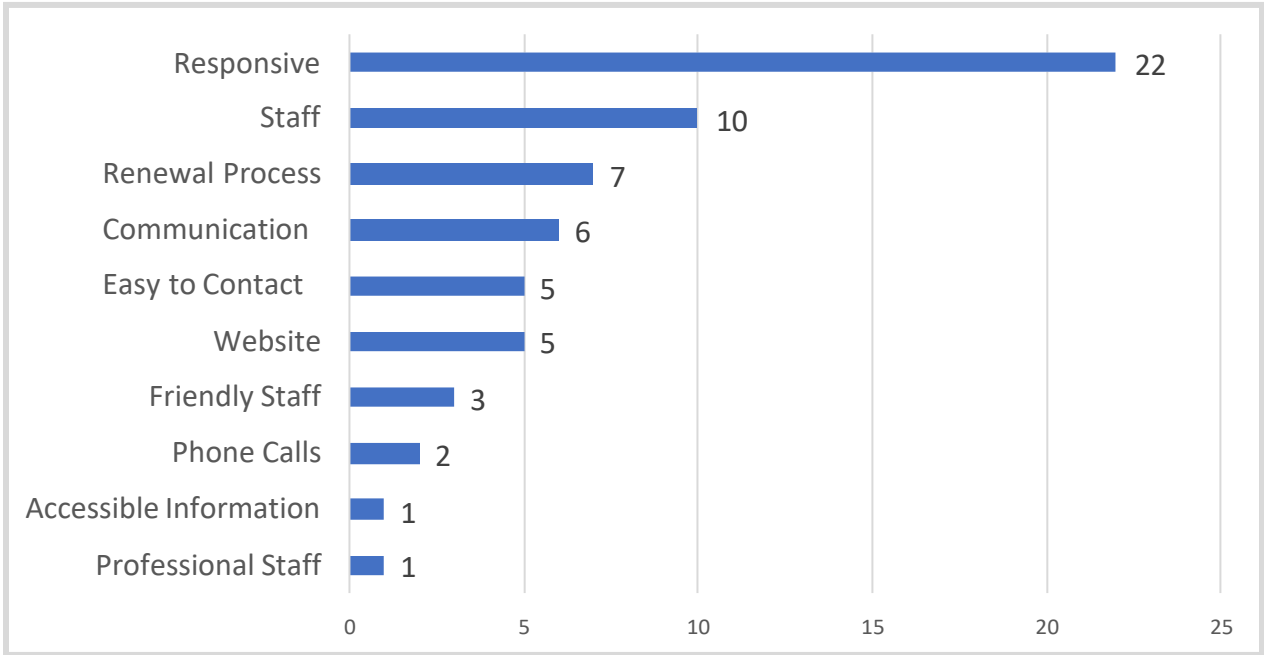
1. External and internal stakeholders believe that communication from the Board could be improved, stating that communication seems to be inconsistent.
2. External stakeholders feel that the Board could be more responsive in their emails and responses to complaints, saying that inquiries often do not get a response from Board staff.
3. External stakeholders would like to see an improvement in the demeanor of staff when responding to licensee questions, saying there is a lack of professionalism and customer service towards licensees.
4. Internal stakeholders would like to see more feedback from licensees to determine where the Board can improve their levels of customer service.



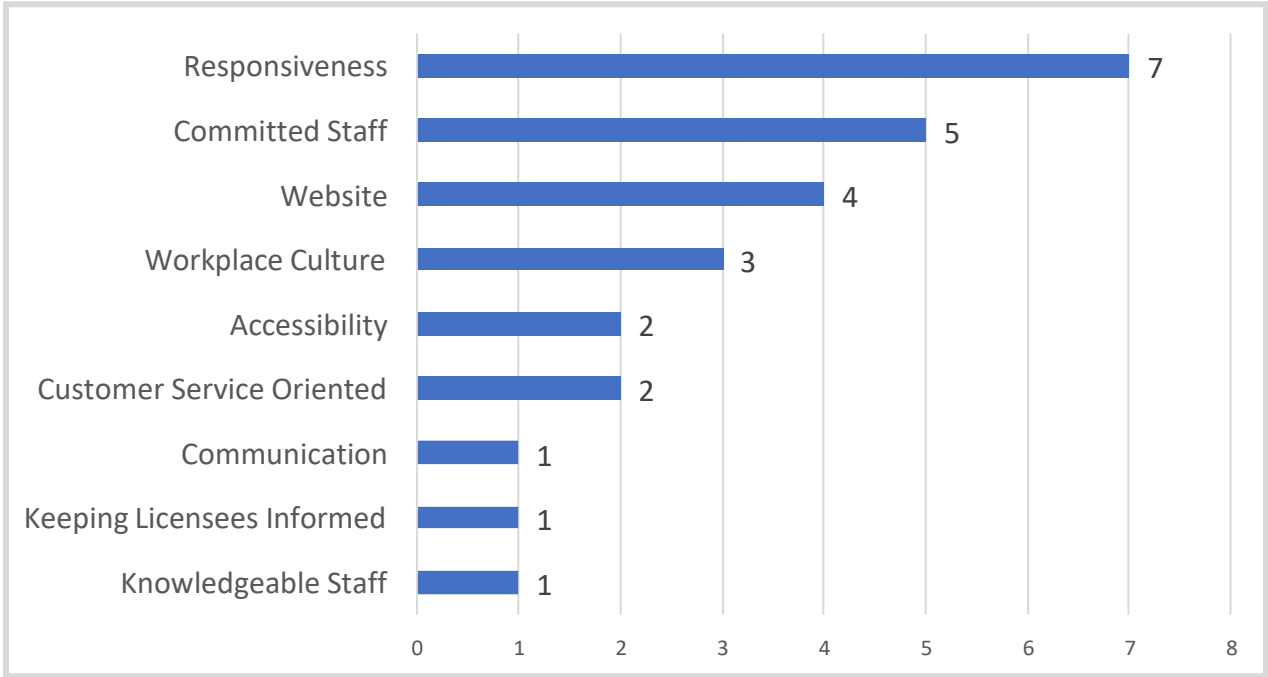
# Customer Service Strengths – Trends

The bar charts below list the trends along with the corresponding number of comments for feedback provided by external and internal stakeholders. Refer to **Appendix C** for a complete list of categories and comments.

## External Stakeholder Comment Trends



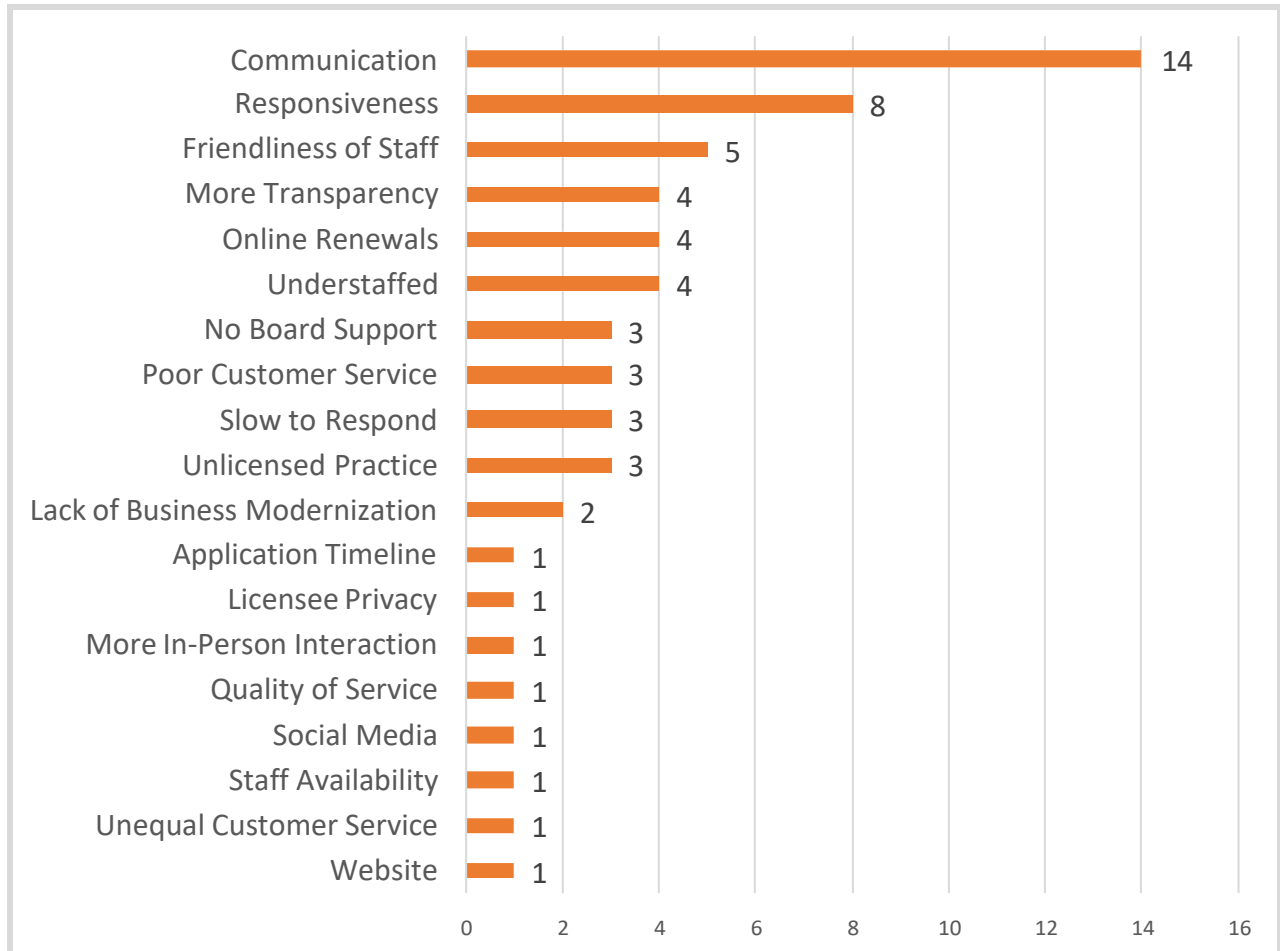
Internal Stakeholder Comment Trends



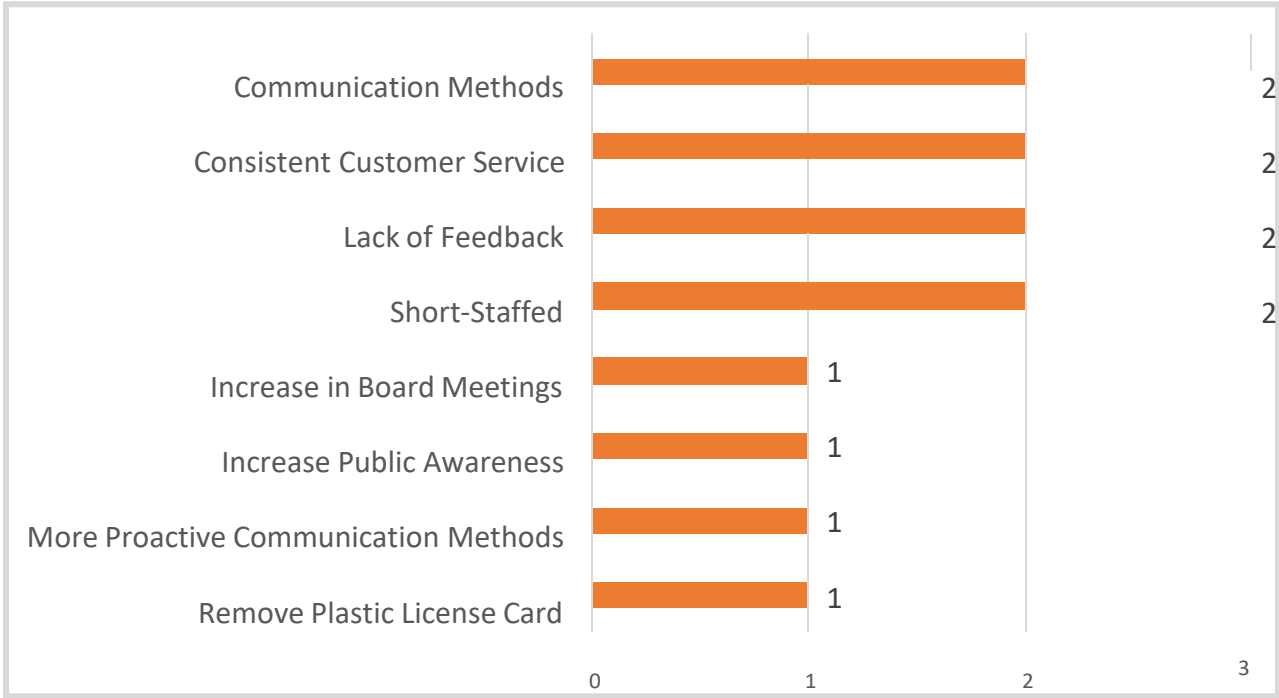
## Customer Service Weaknesses – Trends

The bar charts below list the trends along with the corresponding number of comments for feedback provided by external and internal stakeholders. Refer to **Appendix C** for a complete list of categories and comments.

### External Stakeholder Comment Trends



# Internal Stakeholder Comment Trends



## Customer Service Objective Topics Summary

The list below consolidates and categorizes objective topics recommended by the BPELSG management team and board members. Refer to **Appendix D** for a complete list of comments.

### **1. Modernize Customer Service**

- a. Utilize technology in customer service.
- b. Determine how to modernize means of communication for the newer generation.

### **2. Improve Customer Service**

- a. Explore improving outreach to the general public on member license status.
- b. Clearly identify where shortcomings are and work towards way to improve from an overall perspective.

## Opportunities and Challenges

There are many factors that may impact the future direction of the professions the Board licenses. These could be opportunities the Board may want to capitalize on or challenges they may need to mitigate.

External and internal stakeholders were asked to list potential opportunities and challenges external to the Board that they felt could impact the professions and Board's regulatory role. The following are commonly made responses and/or responses that the Board might reference when considering its strategic plan.

### Summary of Opportunities

The below describes a summary of stakeholder responses to the question "Please describe opportunities that may positively impact the professions". Please refer to **Appendix E** for a complete list of comments.

1. External stakeholders see an opportunity for better promotion of the professions the Board licenses, through expanded awareness and education of the public.
2. Both external and internal stakeholders see an opportunity for collaboration between the Board, stakeholders, and associations to actively advocate for licensure and continue partnership with one another.
3. External and internal stakeholders see an opportunity for the professions to keep up with and embrace emerging technologies in their respective fields.
4. Both external and internal stakeholders see an opportunity for the professions to recognize climate change impacts.

## Summary of Challenges

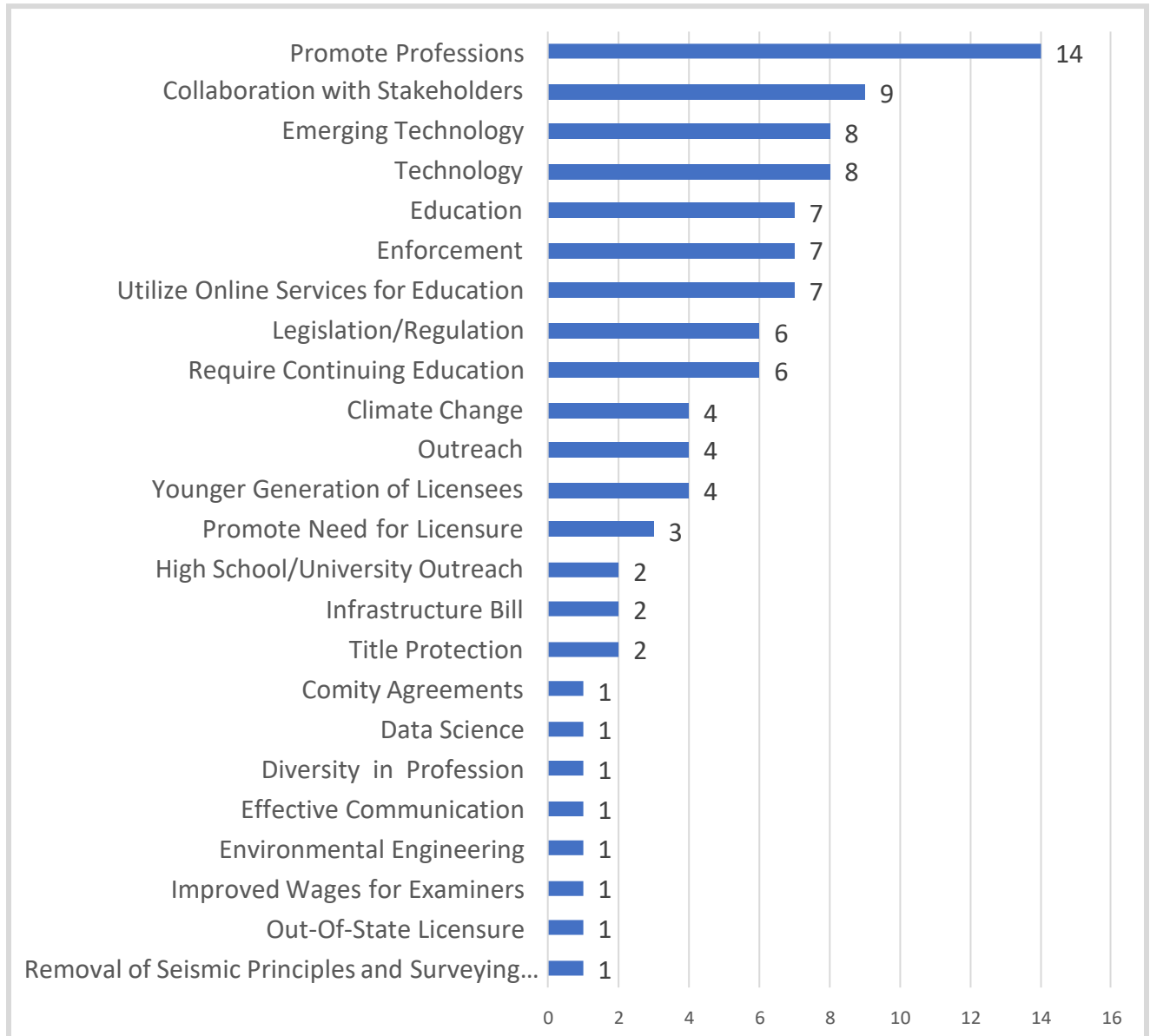
The below describes a summary of stakeholder responses to the question “Please describe challenges that may negatively impact the professions”. Please refer to **Appendix E** for a complete list of comments.

1. External stakeholders see artificial intelligence and automation as a challenge to the professions, stating that the technology makes it easier for unlicensed individuals to perform and decreases the competency of licensed individuals.
2. External stakeholders are concerned about the decline of professionals in the field, particularly in land surveying, fearing that the retirement of current licensees could create a gap in the profession.
3. Both external and internal stakeholders are concerned about the national trend of deregulation of the professions, stating there is a risk to public safety if the requirement for licensure was removed.
4. Internal stakeholders see technology as a challenge, saying the industries need to learn and adapt to emerging technologies.

## Opportunity Trends

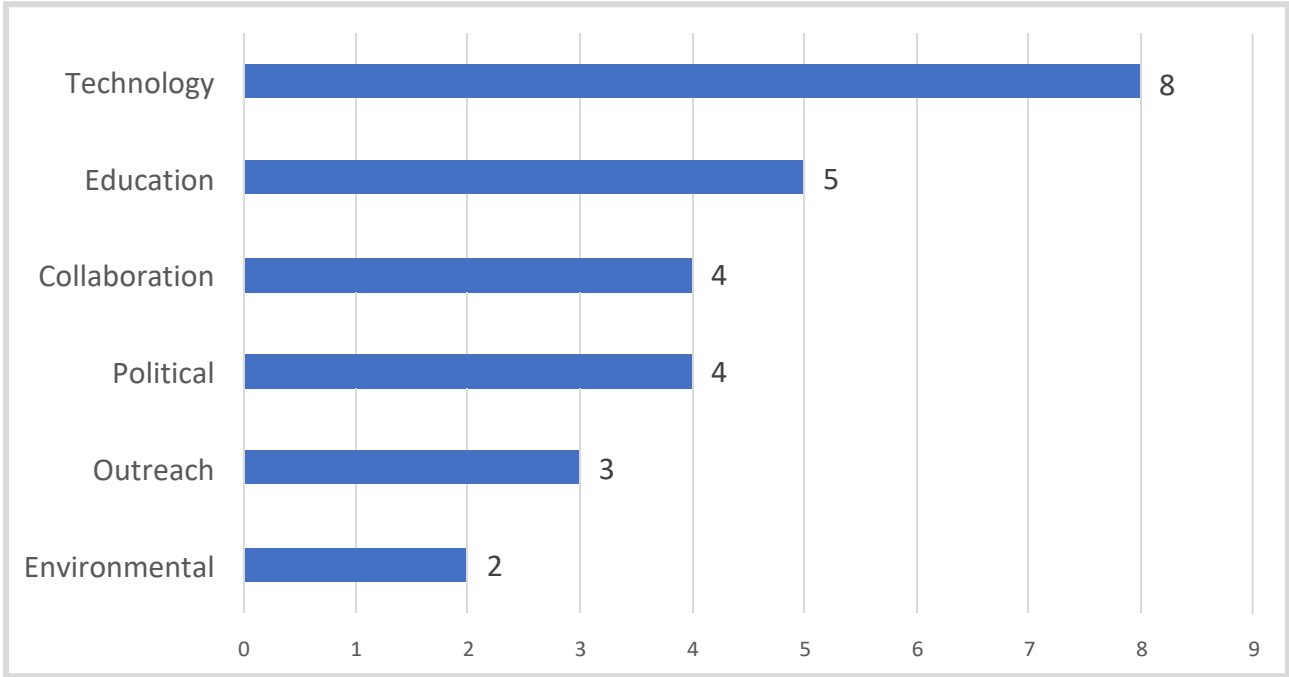
The bar charts below list the trends along with the corresponding number of comments for feedback provided by external and internal stakeholders. Refer to **Appendix E** for a complete list of categories and comments.

### External Stakeholder Comment Trends





Internal Stakeholder Comment Trends



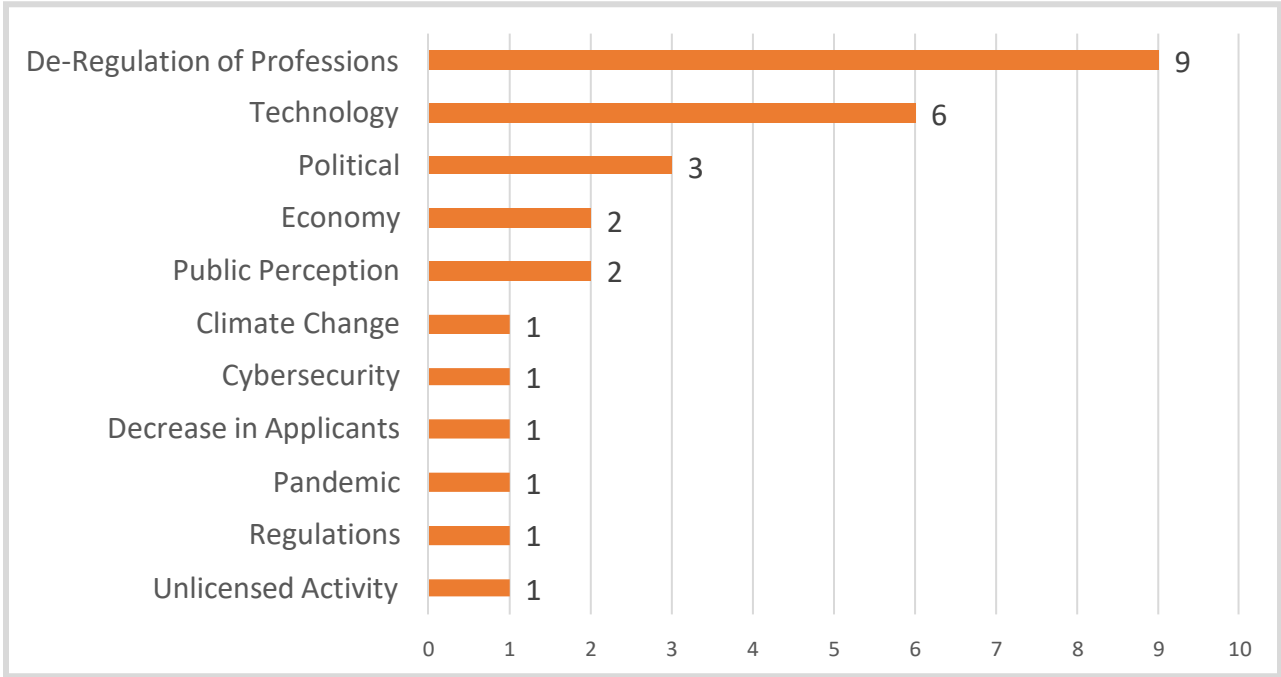
## Challenges Trends

The bar charts below list the trends along with the corresponding number of comments for feedback provided by external and internal stakeholders. Refer to **Appendix E** for a complete list of categories and comments.

### External Stakeholder Comment Trends



Internal Stakeholder Comment Trends



## Appendix A – Data Collection Method

Information for this survey was gathered by surveying external stakeholders, board members, and board management to assess the strengths, weaknesses, opportunities, and challenges the Board is currently facing or will face in the upcoming years. The following methods were used:

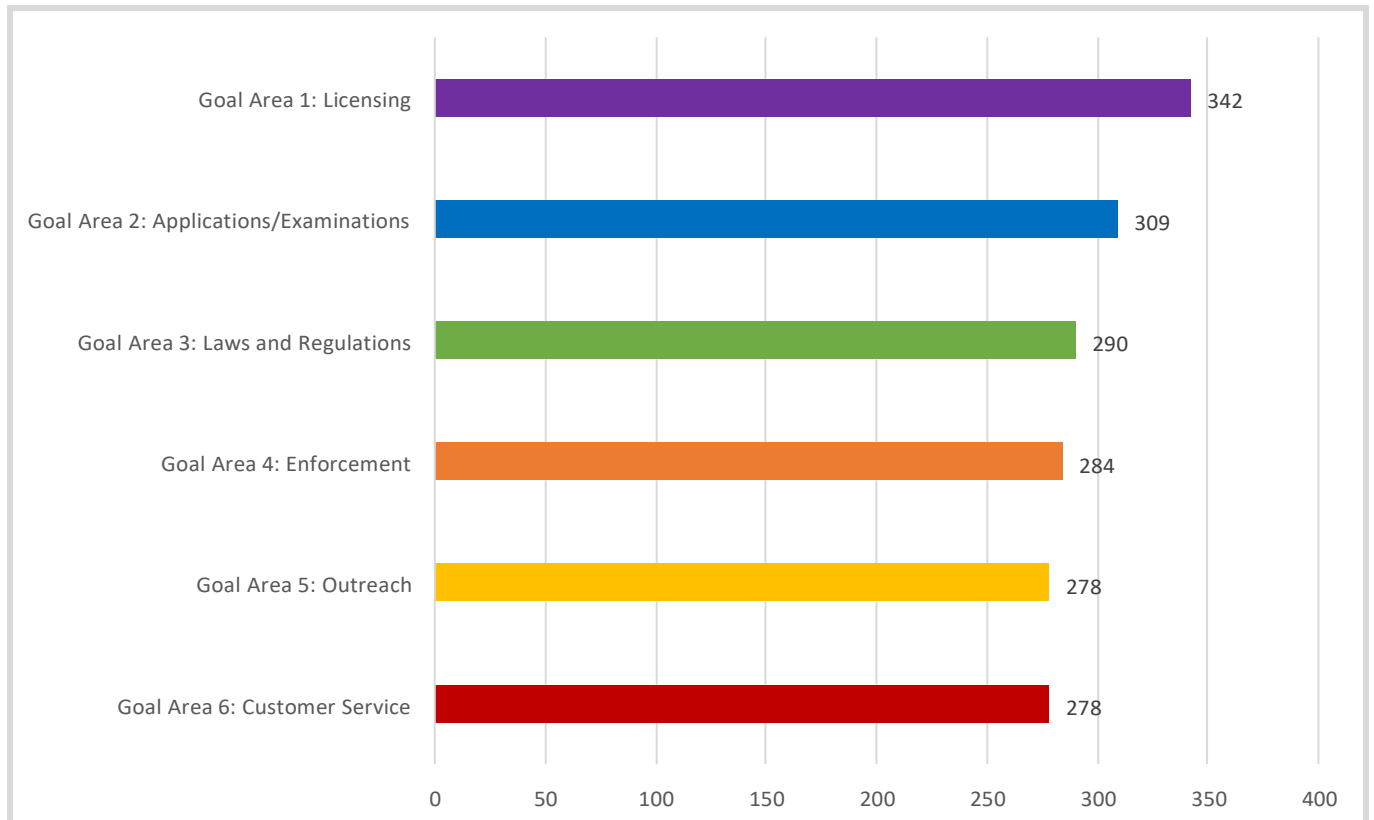
- ◆ Interviews were conducted with twelve members of the Board, as well as the Executive Officer, and five members of board management, and were completed during the months of August and September 2021.
- ◆ An online survey was posted on the Board website and sent to a Listserv of external board stakeholders in August 2021. Six hundred and twenty-three stakeholders completed the survey. The table on the following page shows how stakeholders identified themselves in the online survey.

<b>External Stakeholders Breakdown</b>	<b>Number</b>	<b>% of Total</b>
<b>Professional Licensed by the Board</b>	552	89%
<b>In-Training Certificate Holder</b>	36	6%
<b>Current Applicant</b>	14	2%
<b>Consumer/member of the public</b>	3	0.4%
<b>Represents a professional association</b>	4	0.6%
<b>Other</b>	14	2%
<b>TOTAL:</b>	<b>623</b>	<b>100%</b>

## Appendix B – Survey Data Reliability

A total of 623 external stakeholder responses were received. Participants can skip questions; thus, each question has its own response rate. Survey data reliability per question is detailed below.

### Overall Responses



#### Goal 1: Licensing

Based on 342 external stakeholder survey responses regarding Professional Qualifications, we can be 95% confident their opinions represent all California stakeholders plus or minus 5%. For example, 88% of external stakeholders rated the Board’s overall Licensing effectiveness as Very Effective or Effective. **Based on the response rate, we can be 95% confident between 83% and 93% of external stakeholders would rate the Board’s Licensing effectiveness the same way.**<sup>3</sup>

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<sup>3</sup> Source: University of Connecticut sample size calculator <https://www.surveysystem.com/sscalc.htm>

## Goal 2: Applications/Examinations

Based on 309 external stakeholder survey responses regarding Applications/Examinations, we can be 95% confident their opinions represent all California stakeholders plus or minus 6%. For example, 83% of external stakeholders rated the Board's overall Application/Examinations effectiveness as Very Effective or Effective. **Based on the response rate, we can be 95% confident between 77% and 89% of external stakeholders would rate the Board's Application/Examinations effectiveness the same way.**<sup>4</sup>

## Goal 3: Laws and Regulations

Based on 290 external stakeholder survey responses regarding Laws and Regulations, we can be 95% confident their opinions represent all California stakeholders plus or minus 6%. For example, 80% of external stakeholders rated the Board's overall Laws and Regulations effectiveness as Very Effective or Effective. **Based on the response rate, we can be 95% confident between 74% and 86% of external stakeholders would rate the Board's Laws and Regulations effectiveness the same way.**<sup>5</sup>

## Goal 4: Enforcement

Based on 284 external stakeholder survey responses regarding Enforcement, we can be 95% confident their opinions represent all California stakeholders plus or minus 6%. For example, 72% of external stakeholders rated the Board's overall Enforcement as Very Effective or Effective. **Based on the response rate, we can be 95% confident between 66% and 78% of external stakeholders would rate the Board's Enforcement effectiveness the same way.**<sup>6</sup>

## Goal 5: Outreach

Based on 278 external stakeholder survey responses regarding Outreach, we can be 95% confident their opinions represent all California stakeholders plus or minus 6%. For example, 59% of external stakeholders rated the Board's overall Outreach as Very Effective or Effective.

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<sup>4</sup> Source: University of Connecticut sample size calculator <https://www.surveysystem.com/sscalc.htm>

<sup>5</sup> Source: University of Connecticut sample size calculator <https://www.surveysystem.com/sscalc.htm>

<sup>3</sup> Source: University of Connecticut sample size calculator <https://www.surveysystem.com/sscalc.htm>

**Based on the response rate, we can be 95% confident between 53% and 65% of external stakeholders would rate the Board's Outreach effectiveness the same way.** <sup>7</sup>

### **Goal 6: Customer Service**

Based on 278 external stakeholder survey responses regarding Customer Service, we can be 95% confident their opinions represent all California stakeholders plus or minus 6%. For example, 77% of external stakeholders rated the Board's overall Customer Service as Very Effective or Effective. **Based on the response rate, we can be 95% confident between 71% and 83% of external stakeholders would rate the Board's Outreach effectiveness the same way.** <sup>8</sup>

Data reliability calculator: <https://www.surveysystem.com/sscalc.htm>

To help improve data integrity, the online survey did not provide a neutral option when asking about overall effectiveness. Instead, stakeholders completing the survey chose between a positive choice (Very Effective or Effective) and a negative choice (Very Poor or Poor). This allows the Board to better understand whether stakeholders have a positive or negative view of the Board in various areas.

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<sup>7</sup> Source: University of Connecticut sample size calculator <https://www.surveysystem.com/sscalc.htm>

<sup>8</sup> Source: University of Connecticut sample size calculator <https://www.surveysystem.com/sscalc.htm>

## Appendix C – Strengths and Weaknesses

This appendix contains the qualitative data relating to the Board’s strengths and weaknesses collected during the surveys and interviews.

*The comments in this appendix are shown as provided by stakeholders. Comments that appear similar or on a specific topic have been organized into categories. Comments that were repeated multiple times are grouped with the amount shown in parentheses. The comments have not been edited for grammar or punctuation to preserve the accuracy, feeling and/or meaning the stakeholder intended when providing the comment. Profane language and confidential information in the comments was redacted.*



## Licensing Strengths

The below comments are stakeholder responses to the question “Describe the Board’s strengths, or what they do well, in the area of Licensing”.

### External Stakeholder Comments

#### **Accessible Information**

1. Licensing application, test, process all seemed smooth and navigable for the average professional. More costly than other states I'm licensed in. NCEES record participation is a big plus.
2. Availability of the information
3. Information is readily available from the board.
4. The web site has all of the pertinent information needed by licensees and applicants.
5. Information is made available to the applicants on how to apply.
6. Folks at the Board are always available to answer questions whether its through email or phone call. T

#### **Communication**

1. Easy to use forms, great FAQ, quick response to questions, excellent newsletter
2. Generally instructions are clear.
3. Responsive and clear on fees for exams/licensing renewal.
4. formal process, clear directions once the process is started
5. Also board announces all meetings with attached informaiton.
6. Because of providing regular status emails, I feel the Board is close to all of us and know you will support us - plus keep us mindful of us upholding all licensing standards.
7. Notification letters to licensees.
8. Good communications
9. Exam management, communication with licensees
10. Outreach to local agencies clarifying the roles of licensees has improved in recent years.
11. "Very thorough in their review. Know what is expected."
12. "Information of processes well detailed. Good communication"
13. Effective communications.
14. Consistent messaging
15. "Regular communications. License renewal is straight forward. I always get my renewal notices well in advance."
16. Professional outreach seems OK.

17. The board communicates very well with registered professionals as myself. The e-mail messages and newsletters are well designed and informative.
18. outreach to applicants to increase pass rate and make sure new licensees are qualified
19. Communications to constituents
20. Keeping your licensees informed in timely communications.
21. We'll connected with the professional community
22. Communicate requirements and deadline information. Maintain accurate database and inquiry system
23. Advocates for licensing; perhaps too much so.
24. Keeping us informed with license renewal. Working with us for needed documentation. Flexibility for payment.
25. being able to answer questions when they arise is very helpful

### **Connect System**

1. successfully embracing and integrating new technology such as connect system in your key operations,
2. movement towards electronic filing.
3. Making it more user friendly
4. Switching to online system for renewal is ease of service as well
5. Option for online renewals. Online address changes.
6. Online renewals
7. "Clear Board Rules State-of-the-Art online tool for application and fees"
8. Online renewals and license look-up are efficient.
9. Easy on line renewal
10. Adopting a fast track licensing for new graduates, however, with the weakness described below.

### **Consistent**

1. My license renewals have been timely for 40-some years!
2. Renewals have been sent to me in a timely manner
3. Consistency with requirements under applicable provisions of business and professions code.
4. Systematic
5. Integrity
6. Provides accountability.

### **Consumer Protection**

1. Pursuing compliance cases. investigation and taking remedial action on unlicensed work especially where a public safety or public welfare problem exists.
2. Professional licenses are vital part of any safety measures that must be taken into account in any society.
3. stop unlicensed practice .
4. Protect public health and safety by maintaining a high quality standards in professions controlled by licensing process
5. Protect the consumer when hiring licensed professionals
6. Board persists in spite of relegation to "consumer affairs."
7. Licensing is important to protect the public from unsafe engineering and boundary disputes.

### **General**

1. predictable funding based on fees, diversity of Board members,
2. Managing the licensing process.
3. makes licensure available and provides many testing sites
4. Good job of managing the licensure system.
5. Exams, administration of licensing
6. Maintain records and licenses, provide minimum standards of care for public access
7. Enforcement of the laws regulating practice of engineering.
8. Monitors the professionals; protects the general public makes appropriate decisions and educated the professionals that have erred.
9. Confirm basic educational and professional knowledge
10. Does what is needed to help the profession
11. Accepting licensing fees.
12. Enforcement and applications, references
13. Licensing, Laws and Regulations, Enforcement.
14. Testing and licensing PEs
15. Applying requirements, testing, reviewing, and discipline on complaints, and transparency.
16. Handles licensing well.
17. Consistency, well respected, enforcement, uniformity.
18. License professionals.
19. Administer tests, collect fees, discipline violators, and uphold professional engineering standards.
20. Quality control
21. By simple existence, provide incentives for providers to be qualified and law-abiding

22. notifications
23. The board sets a minimum standard of practice.
24. Regulate the professions and professionals very well.
25. Wide diverse backgrounds and experiences, educational and expertise.
26. Collecting fees
27. Licensing is invaluable.
28. continuing education, board rules availability, enforcement
29. Testing resources and capabilities
30. Being there.
31. Processing applications and record keeping
32. The Board does a good job overseeing licensing and that requirements are being followed.
33. It is extremely important to have checks and balances for a profession so having a board to submit issues with licensees is beneficial to an industry. The Enforcement actions process is much appreciated.
34. You license professionals.

### **High/Professional Standards**

1. Proper vetting of applicants based on education, experience and tested knowledge (depth and breadth).
2. Clearly specify requirements to become certified and (in many cases) adopt nationally recognized standardized examinations to be passed to demonstrate minimum competency to become licensed.
3. "1.) Strict requirements for obtaining licenses within the Engineering Practice Act, particularly for Civil Engineers
  - Additional state testing required for Civil Engineer license
  - Significant authority given to licensed Civil Engineers

2.) Model requirements for having Geotechnical and Structural Engineer licenses as mastery level/title authorities after obtaining the Civil Engineer license

  - Other states should adopt similar requirements

3.) General model to license by discipline

  - Should be used in other states"
4. provide a uniform level of professional requirements. Step a uniform level of conduct.
5. I feel that the testing and documentation requirements ensure that qualified individuals are considered for licensing.

6. Communication, verification of experience, education and making sure the applicants are qualified.
7. Establishing a standard for the profession
8. Professional engineering in California operates at a high level of competency.
9. Rules and regulations are implemented very well. To be able to get your license, you really have to work hard for it through board examinations.
10. Testing for competency.
11. Set very high standards for licensing
12. Ensures that candidates for licensure meet minimum competency requirements.
13. The Board provides licensees with an external source of review to determine if they are performing to a standard of excellence not swayed by an employer.
14. "1) Provides a stable mechanism/process for evaluation of qualifications and licensing.  
2) The emphasis on professional ethics and professional code of conduct that resulted in requirements some years ago was, in my view, a very good step forward toward protecting the public. "
15. Keeping the requirements and difficulties of licensing Land Surveyors high. This protects the public and our industry from allowing any yahoo from practicing.
16. Attempts to create and maintain minimum standards of expertise/competency for professional engineers with some success.
17. "Protect the public in infrastructure design with tough exams & thorough vetting of applicant experience. Respond & investigate alleged violations from unlicensed or aiding & abetting unlicensed persons. Test applicants for latest code changes, methods of determining loads from wind & seismic. "
18. enforce a standard level of practice
19. Standards enforcement for levels of competence.
20. Defending work that belongs to Engineers, specifically in ensuring the a valid PE license is suitable in lieu of specific trainings required by non engineers.
21. Oversight of professional licensing, standards setting, and testing
22. The Board shows capable judgement in the area of examining and licensing new professional practitioners.
23. Difficult to get a license - weeds out the people who should not have a license and be practicing in the state.
24. Protect the public by ensuring that professionals meet minimum qualifications.
25. Professional oversight

### **Improved Process**

1. Improved the process to get a license or renew license by using electronic renewal.

2. Licensing process & renewals is handled predictably and easily.
3. The method by which individuals get licensed is better now than it has been in the past.
4. Processes well defined and improving, expectations are clear
5. Updated licensing portal making it easier to pay dues.
6. The processes for testing and enforcement are orderly and transparent.
7. The application process is fairly quick and applications seem to be processed in a timely manner.

### **Knowledgeable**

1. The Board members associated with my profession (Land Surveyor) are all extremely knowledgeable, care about the profession and do outreach talks and presentations to professional organizations regarding licensing.

### **License Lookup**

1. Excellent database; searchable for the public; manage a wide variety of licensees
2. "On-line license renewal. License look up
3. Consumers can readily look up licenses.
4. License lookup system updated frequently and easy to use.
5. On-line license look up
6. Good use of technology (e.g. license look-up feature)
7. "maintains a database of license status schedules exams"
8. Easy to search licensing status.
9. Fast license lookup
10. In my practice I do not need much. The ability to use the website to determine if a person is/is not licensed and for keeping track of new/proposed regulations/issues. There are so many things that I do not use that should be useful to younger professionals and consumers.
11. Good database search to verify license
12. Strong and comprehensive presence in the engineering field, particularly with the website. Easy to identify registered professionals.

### **Miscellaneous**

1. Licensees have all endured a rite of passage and are a band of brothers.
2. The Board has not caved to outside influence, such as the PDH cottage industry, ASCE, and CASQA.

### **Overall Effectiveness**

1. testing, communication
2. licensing process
3. Professional and public respect
4. timely renewal paperwork
5. Consistent
6. Efficient
7. I feel the board is doing a good job .....
8. Licensing and Licensing renewal. Very straight forward and simple.
9. Clear management of the licensing process. No excess or nonsense.
10. The administrator the license well
11. Everything seems to be organized and work well.
12. None to very little [weaknesses] that I know of, but always room for improvement.
13. None [weaknesses] that am aware of.....
14. not sure of any [weaknesses]
15. Licensing so far appears adequate.

### **Professional Oversight**

1. Oversight and enforcement of regulations related to engineering and Survey practice

### **Relevancy**

1. Keeping up to date with changes in technology and legislation.

### **Staff**

1. "expertise and continuity of staff, legislators and their staff respect Boards input and concerns making the board key stakeholder on any proposed legislation of concern. Active investment of staff and resources for their outreach program. "
2. Knowledgeable staff are available to answer questions.
3. It was very easy to work with staff on the processing of my license.
4. The BPELSG staff is good at training applicants as to how to complete the applications, responsive.
5. Leadership - [Executive Officer] and [Licensed Land Surveyor]
6. The CA Board is professional and efficient. The staff is excellent.

### **Website**

1. Licensing process is well outlined on Board website.
2. Provide website and directions, exams test necessary knowledge

3. Develop and administer robust website and license lookup tool.
4. The web site is well designed.

## Internal Stakeholder Comments

### Communication

1. Good at responding to questions where things are in the process.
2. Communications with the licensees is good. Board tries to get the information out there on updates.

### Connect System

1. "New Connect System is a big improvement. Consumer facing website/system was outdated, but it's getting better. Makes it easier for people to get through the licensing process and reduce staff time. Board did a really good job with the documentation for the connect system."
2. New connect system is streamlining the process. Ability to adapt.
3. New connect system is great in increasing the effectiveness of these processes.
4. "New Connect system that board is working on will help with licensees to complete their renewals online much faster than before. Reduce the amount of work that staff will need to complete in order to renew licenses. Licensees will be able to do their own address changes on the new system. Launching the new system has provided benefits for the licensees."
5. Moving to the new system for managing licensing and online applications is a big plus.
6. Connect platform will be a huge benefit for staff and licensing times will improve.
7. None[weaknesses], as connect will be mitigating a lot of the weaknesses.

### Customer Service

1. Adapting to a needs of applicants.
2. Pretty good customer service for licensees.
3. Through the pandemic and current state of affairs, the board and staff have adapted to being accessible to the public, such as licensees and applicants, through online methods.

### Education on Importance of Licensure

1. Keeping the universities and colleges educated about the importance of licensure. Pre-COVID, had lots of events and reaching the public.



## **Efficiency**

1. Licensing unit are very open-minded to different ideas and different ideas to make them more efficient. History of being short-staffed, but has become more important that they are open minded to trying new ideas to keep business going. Fact that they work well with other units and keep things efficient when faced with challenges.
2. Board does a very good job of doing licensing efficiently and effectively. Serious commitment to doing it well.
3. As efficient as we can be in the process that's used.
4. Very efficient process in getting folks licensed.
5. Renewals side is very effective.

## **Ensure Proper References**

1. The board makes sure the candidates have the proper references from other licensed professionals. Way more important than whether a candidate can pass a test. (from land surveyor perspective)

## **General**

1. Board generally fulfills statutory obligation to license people.
2. Licensing process is done really well by the board.
3. Regulating professional practices in fields that have impact on public health, safety, and welfare.

## **Knowledgeable Registrars**

1. Senior registrars are very knowledgeable for the profession and have technical expertise to perform this role.

## **Online Services**

1. "Great website, keep track of licensed people and issue letter to remind people of renewal, online renewal services with credit card capability. Renewal process is easy and seamless for the licensees. "

## **Overall Effectiveness**

1. Good handle on requirements. Administer licensing process pretty well.
2. Licensing process is good.
3. Board does licensing well.

4. No complaints on the licensing process. Licensing process seems to be working really well. No concerns or delays.
5. "No challenges for performing the actions of getting licensed. Board has very good representation for performing this responsibility. "

### **Staff**

1. "Very highly qualified group of committed public servants. Aware and concerned about the vision and mission statement of the board. Keeping it close to the heart. "
2. Board staff are the key here. Great staff members.
3. Tenure of manager and staff are a strength. Licensing staff have a lot of knowledge.
4. "Licensing has been short-staffed, but team has been all hands-on deck and getting things accomplished. Long tenured staff are very knowledgeable and large depth of knowledge. Having a nice foundation. "

### **Turn Around Times**

1. Quick turnaround times.

### **Website**

1. Amazing job with website change. Working well. Big accomplishment.

## Licensing Weaknesses

The below comments are stakeholder responses to the question "Describe the Board's weaknesses, or what they can improve on, in the area of Licensing".

### External Stakeholder Comments

#### **Adaptability**

1. Difficulty in adapting to changing professional environment.

#### **Board Support**

1. Not all licensees are able to get jobs in their professions after the exams. Need maybe some kind of assistance from the board?
2. Board does not reach out to or mentor in any way sub professionals new in career working to gain experience toward licensure.
3. increase the standard of care for engineering

4. We are guilty until proven otherwise

### **Communication**

1. Not enough contact (face to face) since COVID -19 pandemic struck 2/2020
2. Better communicate the importance of licensing to the public...probably a NCEES task
3. Communications from the Board to license holders is insufficient.
4. Improve on outreach and communication
5. enforcement. public relations w/ those critical of board
6. Be more connected to licensees,
7. I think the board needs to improve communication about policy changes to professionals. It is hard enough to prepare for the exams and should not be losing certified professionals, not due to their fault, but simply due to board's lack of communication.
8. Better on-line support.
9. Hard to get direct answers. Need an easier way to communicate verbally.
10. not helpful with providing meta data to licensed professionals
11. Make the stakeholders feel more involved.
12. Overall communication
13. Area in improvement in terms of informing the applicants to switch from paper exam to CBE without allowing enough time.
14. Could better communicate the role of the engineering board relative to consumer satisfaction. Complaints against engineers are often related to unmet expectations of customer service.
15. The board's direction heading to more online based testing has weakened the board's ability to adequately evaluate license applicants.
16. Provide better info to consumers via electronic media
17. too little feedback to the professional community about the most common lapses in adherence and common conduct
18. do not give enough direction and references to PE's in other states on how to improve their performance in the seismic test. many questions on the last test(2Qtr 2021) did not appear on any study material.
19. Reaching out to licensees for direct comment on issues that the board is considering acting on.

### **Consistency Among Disciplines**

1. Giving EQUAL attention, service and respect to ALL disciplines
2. No standard stamp given to people who pass their license

3. Providing potential applicants with the correct information for future licensing. Specifically in the area of Geology. The board seems to have a vast amount of information for Engineers while information for Geologists is severely lacking.
4. Since the former Board for Geologists and Geophysics merged with the engineering and land surveyors board, compliance, safety issues and focus on the public practice of geology have been deemphasized. I believe that the formerly independent Board for Geologists and Geophysics, was more effective and protective of California consumers.
5. Not adequate representation of Geologists in Board management and practice oversight
6. Tend to over-stress the legal and not focus on the technical knowledge of CA geology.
7. Hampered by a statutory structure that allows civil engineers to be granted more authority than other disciplines

### **Consumer Protection**

1. Multiple choice questions administered by a third party is not a way to ensure public safety is protected by new licensees.
2. When the consumer does a "look up" they show "clear". But when an attorney calls . . . he gets back multiple citations! How is the consumer protected by doing a "license look up"?!
3. The enabling statutes do not mention consumer protection but do talk about protecting the public. There is a real difference. This has resulted in the Board not enforcing all aspects of the Professional Engineers Act
4. Protection of the public can be done much better by the legal system.
5. The board attitude has always been enforcement in all the board processes. Protecting the public interests, the lives and the tax dollars in the engineering fields may be accomplished by scientific based verification methods on the engineering knowledge and by providing the tools to enhance the University graduate engineers for success. The board methods has been based on enforcement, tests secrecy and a lengthy evaluation process rather than placing the necessary tools for guidance toward enhance the engineering knowledge for a candidate success.

### **Emphasize Professional References**

1. Apparent lack of focus on protecting consumers. Too high a focus on examination as the gatekeeper while not focused on professional references. A negative reference should have an impact beyond just not being positive. It should be considered in not issuing a license.
2. I was asked to provide a reference for a recent applicant. When I supervised said applicant he was a student intern that led to the applicant's first full time land surveying

job outside of college. I didn't think the applicant was qualified from my initial time working together. The applicant may have gained the experience necessary to apply for examination after our work arrangement. My reference letter indicated that I doubted the period of time I supervised the applicant qualified as a professional experience. The board deemed him qualified, I figured a follow up from the board directly with me would have been appropriate. I have since started a working arrangement with said applicant and again do not think they have the professional decision making experience. I would be interested in talking with the applicants other references to understand their opinions.

3. Need better way to submit references (four signed PEs)

### **High/Professional Standards**

1. stay out of politics, hold engineers to standard appropriate for the profession.
2. lowering the bar to increase pass rates
3. Create more stringent requirements so that "business people" with questionable ethics have their licenses revoked.
4. make it easier for people to get the license in less years

### **Importance of Licensure**

1. Emphasis on the need and value of all disciplines could be improved...a guidance document for local agencies regarding engineering geologists and hydrogeologists.
2. Enforce the requirement of licensure to practice
3. The number of licensed surveyors getting licensed is low. Perhaps in conjunction with CLSA, ACEC, and other organizations do outreach to companies and individuals to get more people licensed.
4. Need more outreach to youth.
5. Not advocating to make License Act PE's Practice Act PE's
6. Force government to require licensing in all aspects of engineering the same way doctors have a monopoly on all medicine and lawyers have on all legalities
7. We need more LS licensees or the system could fail.
8. Due to lack of enforcement, obtaining a license has almost no value.
9. We use to have State Lands and other agencies promote the licensing of surveyors, now it takes CLSA and private individuals to offer training and seminars
10. Insisting that city agencies use licensed professionals for environmental project management

## **Job Encroachment**

1. Also, contractors are performing construction staking with no reason to stop as the fines are not enough or the board does not pursue any recourse for them. Many are let off with a warning. We need to REVOKE the Contractors License when they are practicing outside of their professional services.
2. Letting interior decorators run major subsidized housing projects in San Francisco.
3. Protection of the practice of Engineering and Surveying from contractors and other unlicensed practitioners

## **Lengthy Process**

1. discipline and review of illegal, bad practices takes way too long. Licensees can game system by requesting hearing after hearing and not showing.
2. Slow enforcement actions
3. Takes too long to process a complaint to resolution. Sometimes taking a year or longer.
4. Enforcement actions seem to drag on for years. One i submitted years ago took about 9 years to come to a resolution.
5. slow internal process i.e. payments to TAC consultants
6. Application process is slow and inconvenient.
7. The licensing process needs to be updated tremendously. It is currently slow and cumbersome for applicants.
8. Speed and efficiency
9. Long turn around time

## **Licensing Fees**

1. late fees are excessive, especially out of state practitioners and people working for the government and no license is really required (Air Force, Army, etc.).
2. Licenses are too expensive. No value in charging for retired status
3. Licensing application fee a bit higher
4. The Board has demonstrated a complete lack of self-restraint in controlling fees. There have been no justification for the fee increases with the tacit acknowledgement of state worker inefficiency.

## **Miscellaneous**

1. Geologists with Engineers
2. A as

3. The Department of Consumers Affairs (DCA) is an obstacle and prevents the Board from doing even better.
4. Draft meeting minutes should be available sooner
5. The Board appears to have move away from california-centric approach to licensing for structural. I believe this dilutes their effectiveness.
6. Keep political entities / agendas out of Professional Engineering and other licensed professions also.
7. The licenses should be issued as a plastic or laminated card in lieu of a paper copy.
8. One thing that has bugged me for years is the font used on paper communications and emails. Needs to be updated.
9. Everyone has access to you full name and address on the website lookup tool
10. Have more regional Board meetings, i.e. in Southern California vs Sacramento.
11. Bloated org. Too large. Too many people.
12. Another government agency with very little accountability.
13. Very few. Too much politics
14. Serving CEs only, screw the rest.
15. I'm drawing a blank. Nothing about BPELSG impresses me.
16. Geologic work in the area of Timberland management is a niche filed. I believe it is worth considering it as a specialty license as very few licensed geologist ever work in this area and those that come in without experience typically take several years to get up to speed and become competent in the field.
17. The board combines incompatible disciplines
18. Title Acts. They sow confusion and attract marginal players seeking professional status
19. The Board is run by a Land Surveyor with zero Law Education, zero Geological background and Zero Civil Engineering Experience. (2)

### **More Online Functionality**

1. Mostly technical issues regarding BPELSG Connect website functionality with Search DCA website
2. cannot submit all materials online, no check on licensees after license has received.
3. More online services would be beneficial and less dependence on paper mail/wet signatures.
4. Organizational Records not on-line
5. Paperwork is filed through mail. It would be easier to handle documents electronically and submit through a portal, and be able to track the status of applications.
6. once pe is obtained EIT doesnt show in the system. provide a line for that in the system.
7. Lagging behind in technology. For example - still collecting license fee old way.

8. Slow to launch web-based license renewals.
9. "Online portal needs work--I realize it is new--but I had to call to get my renewal straightened out.
10. Updating the process to allow for digital inputs and payments would reduce time and save on costs.
11. It would be nice to allow export into excel. I would like to be able to have better search capabilities so I can reach out to licensed engineers for specific jobs I am recruiting for. I would like to have better filters and etc.
12. Transferring over to the new system there were glitches which took extra time for some to access their account. I was affected--not happy, but others were not which is good.
13. The application process could benefit from digitization. Many other states have completely online application processes. This greatly benefits applicants since many application documents are provided in an online format. For engineers, the NCEES record transmittal process should be easier.

#### **Not Applicable or None**

1. not sure,

#### **Public Awareness**

1. Public unaware of Board's role and responsibility
2. Insufficient Recognition of Civil Engineers LAW Enforcement Duties -- you need more private advocacy like mine. Citizens don't even know how essential your License work is to our safety.
3. Outreach and recognition of areas where the public would be served by licensure of practitioners.

#### **Reciprocity**

1. Need to enact automatic reciprocal recognition of licenses from neighboring states. My California license is worthless here in Nevada. There is great political pressure to remove the requirement for licensed professionals in many areas of public service. This does not benefit the community.
2. "California's discipline-specific licensing system needlessly complicates specialized work. The absence of true reciprocity with other states leaves the board open to charges that its true function is economic protectionism rather than protecting the public from incompetent practice. Many working engineers have no reason to become licensed; repeal of the industrial exemption is unlikely."



## Require Continuing Education

1. Poor continuing education regulation.
2. Require continuing education to maintain license.
3. I am also licensed in Texas, and Texas requires 15 units of annual continuing education to maintain my license. One of the units must be in ethics. I think this is something California might like to explore.
4. "Need to require technical, ethical, and business continuing education for professional engineers as most other states do. Need to require 4 not just 2 years of practice under a PE or SE to be eligible to sit for the PE exam as most other states do.
5. continuing education / verification and weeding out of persons with licenses that are incompetent and should have their license removed.
6. Continuing education should be included with licensing
7. No requirement of continuing education
8. Many surveyors appear to be unqualified to test, to practice surveying or are just not ethical in their practice. Continued education requirement would help.
9. Maybe make the test easier and require continuing education and periodic progress tests to ensure competency
10. Continued education for PE's through the Board.
11. Licensees need to understand that obtaining a license means they are minimally qualified. Surveying is a life-long education process. All licensees should be encouraged to continue studies
12. "States requiring continuing education are more likely to keep professional engineering at high level than California. The industrial exemption tends to reduce the influence of engineers to increase engineering professionalism."
13. I'm not aware of a process that the Board takes to periodically reevaluate its professional ethics and code of conduct requirements. If there is a process to review the Board's policies/requirements in this realm then that is good - if there isn't a process to periodically review these then that could be a weakness worth correcting.
14. no continuing education
15. California currently has no mandate for continuing educational courses (PDH) requirements, such as code updates, etc.(like many other states mandate) to renew licenses. This (in the opinion of this licensed engineer) reduces the quality of engineering services and puts the public at a disadvantage when hiring potentially lesser qualified professionals.
16. CA for some reason fails to adopt the Best Business practice of requiring continual education to renew our annual licenses, as done in many other states.
17. No continuing education requirements.

### **Require More Experience**

1. Three years is not enough professional experience for licensure in my opinion. Should be at least 5 after education.
2. 2 years of experience is a bit too short. Should move to 4 years like other states.

### **Responsiveness**

1. The Board staff is unresponsive, bloated, and does not even seem to be able to accomplish simple tasks. It's response time to potential exam takers is pathetic.
2. Board is hard to reach for questions & issues. Phone calls & emails are not returned promptly if at all.
3. It is very hard to get answers about your application sometimes.
4. I have contacted personnel in the enforcement unit on several occasions and I get the feeling I am bothering them. Those contacts were to make them aware of issues I considered to be important to myself, and to the profession as a whole and they were either dismissed, or had to contact them on multiple occasions to get a response. Surprisingly, the responses have been short and dismissive. I likely will not contact the Board in the future for anything.
5. My last experience with the board in regards to licensing was in 2020 (during the pandemic lockdown). It was difficult to get in touch with the board to get questions answered regarding licensing
6. Being responsive and timely.
7. Very little. The Board does not seem to have a staff that can be responsive or justify why it even needs to exist.
8. Slow to respond to inquiries and complaints.

### **Staff Knowledge**

1. The Board should work with the State Board to educate the staff who are obviously unaware of the requirements. Many of the State Board staff are licensed but have never had any real professional working experience. They think a licensed chemical engineer is qualified to supervise a groundwater investigation.

### **Unclear Process**

1. Clear deadlines/expectations for testing requirements and paperwork submission. Just make us a flow chart.
2. can be confusing to find the proper workflow to get a license.

3. All the information required for licensing is available online, but can be difficult to find when applying for the first time.
4. Unclear process for verifications for the minimum requirements for the PE exams from international universities.
5. Difficult to get a license - makes it difficult and or confusing for those who need to get the license to go about getting one. Not exactly a straight forward process.

### **Unclear Requirements**

1. as a representative for my professional organization the biggest complaint we get is work experience is not counted as qualifying experience for civil. Confusing exists in regards to definitions of fixed works... perhaps more examples could be given on what is qualifying work experience versus what is not.
2. Set a uniform level of conduct without over reaching. It is not boards responsibility to correct ever wrong. There are always 2 sides to a people being unhappy with results. Be fair and just.
3. unrealistic burdens for licensed to provide proof of work experience for test candidates, unnecessary requirement for stamp image, etc.
4. Clarity of "broad based progressive experience in land surveying satisfactory to the Board"
5. PE license requirements
6. Clarify how applicable work experience can be calculated for applicants so employers know what the realistic time frame required to be eligible for taking the tests.

### **Unclear Responsibilities**

1. The Board does a terrible job describing professional responsibilities. Who is qualified to perform what task. For example, the State and Regional Water Boards routinely require reports prepared by a licensed professional unqualified to perform the work. Requiring pond berms to be designed by a CEG or the generic "licensed professional" requirement. The list is endless.
2. The structural engineering license requirements are a joke that caters solely to buildings. It confuses the public as engineers that design dams and bridges in California are almost never a "structural engineer".
3. The board appears to be out of step with similar boards in other states when it comes to licensing of Civil Engineers who work in the area of compressed fluid flow. Other states recognize the work done designing of natural gas facilities, however, the board makes this much more difficult than other states.

4. the Board has had limited inclusion of licenses professionals in their activities, limited direction and use of Technical Advisory Committees, which could facilitate review of emerging issues or changes in the environment of professional practice.

### **Understaffed**

1. Need more licensing review groups.

### **Unlicensed Activity**

1. We struggle with unlicensed surveyors performing construction work.
2. Provide better oversight of unlicensed surveyors practicing, as well as other professions providing surveying
3. Severe penalties for those who practice without a license or incompetently
4. Too many unlicensed persons are working the public. Unknown how to reduce this problem that does not involve referrals by licensed persons.

### **Unqualified Applicants**

1. I do not think the Board has the ability to verify the candidates background. I (unfortunately have seen other professionals lie about the candidates background and am appauled to see someone get a license as such.

### **Website**

1. Website is wordy and not user friendly,
2. The website and instructions are very difficult to understand.

## Internal Stakeholder Comments

### **Background Checks**

1. "Should be a continued best practice in conducting background checks for all applicants for all license types, especially for those out of state in addition to those practicing in CA. Continue to do best to understand background of licensees to minimize the number of cases to consider. "

### **Communication**

1. Communication. Licensing unit has room to communicate what they are working on, both internally and to others in the office.

2. How to get the word out to licensees for updates. Would like to gather more email addresses from licensees for better communication, instead of hoping they sign up for the email list.
3. Communication could be improved. Getting notifications out sooner with more transparency. Notifying individuals of what's to come could be impressed.

### **Continue Connect Roll-out**

1. Transparency to applicant. When someone submits an application, there's about 60 days of "dead time", there isn't anything the applicant can do to determine their progress. Now that the board is moving to Connect and licensing unit is on Connect, the applicant can see exactly where their application is in the process without contacting the board.
2. The board is mid-stream in rolling out online access for licensing. Would like to see this continue.
3. Adapting to new system and telework and identifying how to re-invent self. Transition to new system and maintaining same level of work.

### **Continuing Education**

1. Licensing process should include some continuing education. There isn't much proof for licensees to show that they are keeping up with the industry changes. Board should have an obligation to include something with the continuing education.
2. Ensuring that licensed members complete continuing education and are up to date on ethics. Would like to see pattern of continuing education that touch on areas such as ethics.

### **Improve Licensing Process**

1. Issues license individually, Not working with organizations (Caltrans for instance) to give license to all qualified. Caltrans has requested to have licenses issued for all their people at once, but currently there is not the capability to issue license that way.

### **Overall Effectiveness**

1. Although the board tries, there can always be improvement in need for licensure.

### **Processing Times**

1. Processing times and response times, which will be improved upon by the connect platform.

## Value of Licensure

1. Getting out into the potentially regulated community and explain importance of licensure. More sophisticated methods in reaching folks who may potentially get licensed.
2. "Licensing discussion would've been great if done in the freshman year. University levels don't always seem eager to hear about licensing, not sure how to incentivize licensure. "
3. "The board could improve the publicizing the value of licensure to legislators, especially newly elected legislators. Publicizing the need to licensure for the professions to the general public. "

## Applications/Examinations Strengths

The below comments are stakeholder responses to the question "Describe the Board's strengths, or what they do well, in the area of Applications/Examinations".

### External Stakeholder Comments

#### Accessible

1. Locating the applications is easy.
2. Flexibility in exam format
3. Information available online
4. Finding the proper documentation on line and the availability of staff to answer questions.
5. Materials & resources are easily identified & accessible.
6. Relevant information is available on the website/application forms. Through 2020 webinars for future licensees (PG) to understand licensing requirements and steps in the process were very helpful.

#### Communication

1. As a current applicant, I have appreciated the direct communication I have received regarding my application. The clear instructions on the applications/website are also very helpful.
2. Available to answer questions about the process
3. Good communication between applicants and staff.
4. Explanation of the process.
5. again communication is good

## **Computer Based Exams**

1. Being a leader in computer exams
2. Exams are Computer based.
3. The computer testing is effective and efficient. It provides greater flexibility than when I took the test 18 years ago.
4. Applications and Examinations appear to be streamlined and well done with computer based testing.
5. Online exams available year round for some licenses
6. Ability to move to computer based testing.
7. CBT. Computer Based Testing process was an excellent experience. The tests I have taken have felt fair and balanced.

## **Consistency**

1. The current engineering licensing process seems solid and consistent with other States.
2. Consistency in examination

## **Consistent Updates**

1. One strength is consistently updating and improving the California-specific PG exam accounting for changes in technology, professional methodology, and regulations.
2. keeps with current technology and relevant legal i.e. boundary law on exams
3. Have broaden the many sub-professions in exams more. Exam materials have been updated recently.
4. Recent restructuring of exams is positive.

## **Consumer Protection**

1. State-specific civil exam is necessary in this region to protect the public.

## **Efficient Process**

1. applications are processed quickly
2. Very clear process. I like the flowcharts.
3. The applications procedure is easy to navigate and appeal. The examinations are updated continually with the input of subject matter experts, a good process.

## **Exam Availability**

1. Location and frequency of examinations seem adequate.

2. Multiple-testing centers for the CSE is a bonus
3. Test locations & materials easily accessible.

### **Fair and Valid Exam**

1. It was a good exam, you had to know your law but there weren't any "gotcha" questions.
2. The exam construction I've been on seems to be effective, accurate.
3. The PE exam was fair and covered a range of topics.
4. Appropriate testing methodology and questions.
5. Exams are prepared carefully with subject matter experts and testing experts
6. Gets input for the exam from practicing licensed engineers
7. Examination materials have been well developed in recent years, with the input of licensees.
8. Engineering problems important in California, such as earthquake considerations, are provided for.
9. Exam materials are appropriate
10. The requirements for licensure are well defined and examinations are standardized.
11. Tough exams
12. Insuring evenness in the testing process as well as the application of quality controls to the professional
13. Commitment to developing a licensing exam that is comprehensive and fair for a minimally qualified applicant.

### **General**

1. The board provides licensure for candidate who can demonstrate their competence.
2. Administration of testing
3. Use nationally recognized standardized examinations to determine minimum competency of applicants.
4. Manage the process.
5. Examination for PEs does require preparation and understanding of basic concepts.
6. obtaining the documentation and verification that the applicants are qualified.
7. Additional requirements for California PE is strength
8. testing is appropriate
9. It is a rigorous and expensive process
10. Enforcement of licensed and unlicensed engineers.
11. Exams are required and I agree they should be.



12. Applications and examinations are very orderly and easy to accomplish through the online facilities.
13. Making sure qualified individuals sit for the exam.
14. "Doing what is needed"
15. Administer applications and exams.
16. A comprehensive set of test questions simply applied
17. Maintaining professional experience (training under a licensed professional) for applicants.
18. Consistent exam levels/expectations.
19. Respected license status by other states
20. CA effectively processes and exams more applicants than any other state.
21. They eventually get it done
22. Examinations are invaluable.
23. Integrity
24. The Board effectively evaluates license applications and administers the examinations.
25. Running the testing
26. Provides structure for this to happen.
27. Manage the Huge task of licensing every profession.
28. Follow NCEES and state specific requirements. Setting the bar for standards of practice
29. record keeping
30. They review candidates applying for the exam thoroughly. Their testing is very uniform for licensure.
31. Verification of candidate's education & experience; testing candidate's technical knowledge.
32. assuring candidates meet the minimum qualification for the EIT and PE exams.
33. Testing
34. admittance of candidate process and assurance of candidates credentials to attend the Professional engineering examination.
35. Testing and license application processing
36. Provide examinations to test for minimum qualifications.

### **High/Professional Standards**

1. Education, exam and experience requirements are logical. Much better than "common law states" like NY and FL, which discriminate against out of state applicants.
2. standards are applicable
3. "Additional state testing required for Civil Engineer license weeds out many candidates beyond the NCEES PE Civil Exam

4. makes sure the applicant is knowledgeable about surveying !
5. the board is very good for verifying US engineering graduate credentials
6. Well defined requirements
7. A license is no guarantee that the public will be protected. And inability to become licensed is no guarantee of incompetence. However, the process does weed out many of the incompetents.
8. Testing the engineers competence in the area of seismic principles.
9. assuring candidate's education minimum qualifications meets the criteria to appear for PE-exams
10. The difficulty of the exams do well to vet out the under prepared/inexperienced professionals.
11. well defined and defensible standards
12. Screens potential candidates to ensure they are competent to take the exam
13. Beastly hard exams with high failure rates
14. Make sure that the content of the examinations is adequate to measure basic skills in the area of the license but not so difficult as to deter applicants.
15. making requirements clear and consistent
16. Ensure applicants have appropriate education requirements
17. We have one of the strictest testing requirements that acknowledges the challenges facing engineering in California.
18. Testing is adequate in identifying candidates suitable for licensure
19. The Board enforces the standards. This seems relatively straightforward part of their work.
20. Gatekeeper, writing and administering exams to separate the qualified from the unqualified.
21. Rigorous examination process coupled with enforcement.
22. Robust exams weed out folks whose qualifications are too weak for licensure, a good thing.
23. Maintain high testing standards.
24. Good idea to separate the 8 hour exam from the surveying and seismic exams. There is too much knowledge that must be tested, and it cannot be effective to test with one exam only.
25. I would like to read more about how the Board is changing to adapt to new technologies while still promoting high professionalism.
26. Have a state specific exam. Our state is varied and has much to offer in the way of difficult and diverse geology. Applicants should be familiar with the variations and should know where to go in order to answer the questions they have.

## Miscellaneous

1. Enforcement
2. 1. The ability to make changes.      2. The ability to influence legislation.
3. Systematic
4. Need to consider Masters fir PR.
5. Seismic awareness.
6. Has developed a good study guide on sections of the test.

## Not Applicable

1. I do not have experience with Computer Based Testing. Nor have I seen example tests.  
So I can not comment
2. Not familiar with current applications or exams
3. See my comment under "Licensing" - from my perspective the goals under licensing and Applications/Examinations are so intertwined as to be the same. If the intent is to get comments on detailed processes for applications and examinations then I don't have an opinion on that having gone through that a bunch of years ago.

## Online Functionality

1. On-line applications

## Overall Effectiveness

1. Easy forms, great FAQ, reasonable and clear deadlines, education requirements are clear
2. Communicates and administers the application and exam process well.
3. The application and examination process is done well.
4. Seem to do very well in screening applicants.
5. great at exam prep, great at exam admin
6. Generally difficult exams. This is good.
7. The process is fine
8. Thorough vetting, with references from current PE's.
9. They work to schedule examinations during the pandemic.
10. Excellent standards.
11. The California-specific exam for the Certified Engineering Geologist specialty license is an asset and tends to produce good practitioners.
12. Adequate
13. Consistency

14. Set the standards
15. In the discipline of Land Surveying, the Board excels at this.
16. They do well
17. I again feel the minimal requirements and testing are adequate for a candidate.
18. I believe the Board is achieving this goal.
19. Consistency
20. The exam and process is well done. The pass rate in the past has varied somewhat but has grown more consistent over time which indicates a more fair administration of the examination/qualifications process
21. Having participated in test development and evaluation, I believe this is a strength of the organization..
22. I like the idea of the California specific exams for the licensing of Professional Civil Engineers. I think they do a good job of ensuring the success of CA Civil PEs
23. Good though
24. I feel the current tests are adequate for minimal knowledge.
25. They do a pretty good job of administering the licensing exam.
26. None [weaknesses]
27. The board handles the application and examination process well.

### **Responsiveness**

1. The processing of an application is timely. Their responsiveness to an applicant i.e. turnaround time is good.

### **Staff**

1. I always felt like staff members were fully aware of my application (it had good notes) and could help me at any step of the way.

### **Standardized Exam**

1. standardized 8hr exam that is accepted throughout the country.
2. Provide and enforce uniform standard. There needs to be "push-back" to those who want heavy standards to limit the entry into the profession.
3. Uniform exam
4. Using NCEES standard exams, developed CA specific seismic tests
5. Uses well-regarded national exams in many disciplines

### **Website**

1. The website explains the process and what is needed.

## Internal Stakeholder Comments

### **Adaptability of Board Staff**

1. Modernizing system for last few years, despite hiccup from the pandemic.
2. Through the pandemic and current state of affairs, the board and staff have adapted to being accessible to the public, such as licensees and applicants, through online methods.

### **Collaboration**

1. Board does a good job working with NCEES and ASBOG over things they have jurisdiction over.
2. Overseeing NCEES and ASBOG, the organizations that prepare the national exams used by the board.
3. "Partnership between board and Prometric has resulted in a fairly glitchless process. Prometric has been a very knowledgeable vendor and providing safety measures and making the exams as accessible as possible. "

### **Computer Based Testing**

1. The board always has representation at national vendor conferences. Helping Geology exam move to CBT over paper-and-pencil.
2. Have moved to computer based testing on all disciplines. Ability to use computer based testing has been a big strength.
3. Easier proctoring with computer based testing.
4. Vendor provides computer based testing.
5. State-specific exams are computer based now and results get out quicker.

### **Connect System**

1. New Connect System is a big improvement. Consumer facing website/system was outdated, but it's getting better. Makes it easier for people to get through the licensing process and reduce staff time. Board did a really good job with the documentation for the connect system.
2. "Transition to Connect system, is meeting the needs of the applicants and examinees to some degree. Very effective starting from day 1 of implementation. Getting lots of favorable feedback from those who are currently using the new system. "

3. New connect system has been launched for professional engineers, and will benefit applicants. Applicants will be able to see through user dashboard where in the process their application is, reducing amount of people calling the board to check their status. Will have information more readily available for the applicants. Reduce processing times.
4. Connect platform will be a huge benefit for staff and licensing times will improve.

### **Customer Service**

1. Way the board works with applicants. Customer-service based.
2. Providing individual service to applicants by licensed professional staff.

### **Exam Accessibility**

1. Taking the exams is more accessible nowadays - helpful towards getting more people licensed.
2. Examinations - ability for examination staff to adapt to converting to virtual exam development sessions. Adapting very well to virtual environment without any hiccups.

### **Exam Relevancy**

1. Maintaining the relevance of state specific exams.

### **Fair and Valid Exams**

1. Collaborate with vendors very closely just to make sure that the exams that are produced are relevant and legally defensible.
2. State specific examinations for some license-types. Development of exams are good, and have good, competent SMEs helping with development of exams.
3. Experience when getting application and exams done, board did a great job with the appeals process. Committees would test the exams for validity and fairness. Do a great job catering to the folks who sit for the exam.

### **General**

1. Board generally fulfills statutory obligation to license people. Good handle on requirements.

### **Letters of Reference**

1. The letters of reference are critically important for land surveyors.

## **Overall Effectiveness**

1. Things are going great.
2. Primarily smooth operation.

## **Responsive**

1. Good at responding to questions where things are in the process.

## **Scheduling Process**

1. Scheduling process seems to work really well.

## **Staff**

1. Customer service for the applicants. Assistance with issues with the examinations, and applications. Staff are very communicative with applicants and exam takers.
2. Tenure of manager and staff are a strength. Licensing staff have a lot of knowledge
3. Senior registrars are very knowledgeable for the profession and have technical expertise to perform this role.
4. Team environment. Long tenured staff are a good base to have and have a wide depth of knowledge.
5. Examination process is extremely well, notwithstanding challenges from COVID. Staff periodically report activities to the board. Ongoing dialog. Reports include number of people who took exams, what exams were taken, etc.
6. Exams - Communication unit tries to keep with exam vendors. 2 national vendors and 1 for state exam. Unit is very involved with every part of the process.

## **Website**

1. "Very good data on our website, fast response to applicants.

## **Application/Examination Weaknesses**

The below comments are stakeholder responses to the question "Describe the Board's weaknesses, or what they can improve on, in the area of Application/Examination Weaknesses".

### External Stakeholder Comments

## **Applicable Exams**

1. Survey exam not necessarily applicable to all engineers. Seismic exam not necessarily applicable to all engineers.
2. PE Civil candidates require two additional tests. Seismic Principals and Surveying. This is not in-line with other state boards, and causes a unnecessary burden on applicants. Additionally, It has discouraged students from perusing civil engineering compared to other avenues of engineering. The Board should consider removing this requirement.
3. Instead of requiring both seismic and surveying exams for the Civil Engineer License, in the future candidates may be allowed to choose either of the exams depending on their specialties/focus within civil engineering. Perhaps an additional state exam can be added in another branch of civil engineering (i.e. water resources). Additionally, Prometric testing occasionally has glitches which can derail candidates.
4. Uses inapplicable national tests for geology
5. Eliminate the surveying for Structural engineers
6. California only examinations for some exams seismic and surveying for Civil engineering that are not necessary in 49 other states these should be eliminated.
7. PE Civil candidates require two additional tests. Seismic Principals and Surveying. This is not in-line with other state boards, and causes a unnecessary burden on applicants. Additionally, It has discouraged students from perusing civil engineering compared to other avenues of engineering. The Board should consider removing this requirement.
8. Exams can be favored to a specific profession at times. Geologists have a wide range of responsibilities; however, industry tends to pigeon hole those professions. Make the exams evenly distributed amongst the sub-categories of professions.
9. Requiring survey exam for Structural PE applicants. Surveying is outside the education and expertise of the Structural discipline in general.
10. Tests used to be more applicable when they were created by CA engineers in CA. That was your strength. You no longer have that strength.
11. PE Civil candidates require two additional tests. Seismic Principals and Surveying. This is not in-line with other state boards, and causes a unnecessary burden on applicants. Additionally, It has discouraged students from perusing civil engineering compared to other avenues of engineering. The Board should consider removing this requirement.

### **Applicant Competency**

1. Allowing exam retakes without additional training, so that applicants eventually find an exam they happen to pass without improving competency. there is an over focus on technical aspects during the professional surveyor's exam. Why would a professional exam contain any calculation rather than focusing on testing experience and judgement?



2. Verifying that the various schools the applicants attend are ABET certified and that the people making the recommendations are licensed by the appropriate state.
3. Applicants are too few, Applicants are not well prepared for testing, Passing score for Testing has been too low, public out-reach or educating what surveying is has been non-existent. I think raising the fee to test and having more prep courses for the test would be beneficial. Requiring a college degree is also a great idea, but many of them using college credit as experience is truly a joke. I would remove that benefit so that they get real life experience.
4. Exams do not test the knowledge of candidates. Some subjects are outdated for practical field. The design of exam measures if someone is fast not a knowledgeable engineer
5. There should be a vetting system for those signing for the applicant's experience. A person that has spent their career in the field as a surveyor is not qualified to become a licensed surveyor - they tend to be unfamiliar with the mapping standards and applicable laws. Conversely, an office only person can be reasonably proficient after a year of responsible charge in the field.
6. Candidate screening is difficult and subjective
7. Insist that examinations reflect a broad based knowledge in their field.
8. More guidance to applicants would be helpful to ensure the qualifying experience being documented and submitted is described accurately. Although 2 years experience is credited towards licensure with an accredited degree, my experience indicates license applicants really need more field experience before sitting for an exam, especially with public agency applicants. Public agencies, such as the State, tend to limit the breadth of tasks a responsible charge candidate works. A candidate does not really have the big picture of what the PE responsibility is, regardless of an agency's attempt to provide a rotation program that varies the training. More experience is required for surveying experience in civil applicants. The Board needs to work towards changing the education of engineers to include more focus upon surveying and its importance in the design and construction of civil works. I encounter licensed engineers depending upon Google Maps and other platforms to provide horizontal and vertical control on projects. This is wrong. Their excuse is they do not have the schedule to allow for a proper survey or cannot find qualified persons to do this work.
9. Accepting applications from unqualified persons
10. The individual noted in previous comment had passed the licensing exam somehow.
11. An applicant can score very low in one area and still pass the exam. Engineers have to individually pass the seismic, survey and engineering.

12. The weakness isn't the Board's weakness as much as the weakness of the land surveyor's exam. Although there exists a low pass rate, the folks passing the exam, generalizing, are not minimally competent.
13. There is a significant need for more college educated land surveyors and the programs that produce them
14. "Exams do not measure the knowledge of candidate. For older candidates the computer base exam can be overwhelming"

### **Better Study Materials**

1. Do not provide a lot of direction on the PLS exam, on items like format and content. A lot of examinees guess on what to study and have trouble focusing on the appropriate topics.
2. Linking to potential resources for exam prep. It's been a while since I've looked, but the limited resources referenced were honestly awful and there were far better options available.
3. the lack of practice exams available for LS

### **Communication**

1. improve communications with potential applicants.
2. Confirming applicants experience
3. Staff. Examinations are difficult to schedule.
4. Communication was also a weak spot last year, I had an employee that felt like they were in limbo as the exam was shifted, postponed, delayed, etc. I understand it was covid but that made it all the more important to send out regular email notifications to check in with folks.
5. While I recognize the many factors that probably contribute to it, receiving a response/confirmation of a license application takes much longer than expected.
6. Communicate better with students and young engineers on the importance of taking exams early.
7. "Need clarification for SE application registration for qualifying experience. Called and emailed for help regarding 3 years minimum qualifying experience and responses were unhelpful. It was not clear if that experience was by the time of application or by the time I would take the test. It took a very long time, months/weeks to receive an update about my application status."
8. Better communication with practicing licensees
9. "Do not follow through communicating annual fees, moreover canceling licenses without warning the professions due to unresolved back payments is unacceptable- the

board should communicate with professionals about such decisions. The Licence can not be simply taken away for lack of payment, it can be inactive but can not be simply taken away- it is too much of investment of work, schooling and money to be simply cancelled. "

10. Sometimes difficult to speak with someone who has special circumstances or unique questions about example eligibility.
11. Limited communication when applying for license (2020 - 2021), including confirmation for exam registration and changes due to COVID; it would have been beneficial to obtain confirmation early in the process.
12. need improved communications with applicants for exams
13. Then after the application is submitted there is absolutely no communication or info as to the status of your application.

### **Consistency in Reviews**

1. Application review/qualification of eligibility to take the test and practice in Civil can seem inconsistent between reviewers.
2. More attention is needed in objectively evaluating license applicants from a committee of evaluators instead of mostly online-based evaluations.
3. Provide better reviews of those who want to become licensed, pay closer attention to candidates references, provide
4. poor vetting
5. License candidates moral terpitude is not given adequate weight in reviewing candidates.

### **Cut-Scores**

1. CA-Specific civil engineering Surveying exam and seismic exams evaluations exams cut-scores are in-consistent. cut-scores are selected by the Board-evaluators with intent to keep statistical max number of candidates passing an exam. exams should be designed to test the minimum competency level of a subject criteria. As an example are the previous year's statistical data for the Civil engineering surveying for the past 20years shows only 25% to 35% passing candidates. The board should have a consistent evaluation process designed to test average knowledge in the subject matter and protect the public safety and interest
2. "1. tacking so tools to very international university graduates. 2. The civil engineering CA-surveying and seismic exams evaluation process is not be based on real secitifac data. The 2-exam score cut-score evaluation method is in need for improvement with

science based methodology. The existing process contain mistakes harming examinees and is not serving the public interests "

3. CA-specific exam PE civil surveying and seismic, exam evaluations process "cut-scores" are designed with the sole intent of testing only. minimum cut-scores evaluation criteria are not based on any scientific data, they're based on a board member selection of the cut-score number in order to have specified number passing candidates for the examination. as an example, for each PE-civil surveying exam a board-member in charge will select cut-score upon their liking, with the intent of maintaining only 25% to 35% of passing candidates. The intent of selecting the cut-score of the board liking becomes nothing but a clerical process. And then cut-scores sections will have NO relevancy to testing the candidate engineering level knowledge in the civil engineering surveying nor will it become a relevancy to protecting the CA-public interests. Hope these process will change to a scientifically based process similar to an already administer system thru higher education institutions.
4. The PE Specific Civil engineering CA-exams evaluation for establishing exam results thru cut-score selection method is vague and lengthy and without a specific standards. Each administered test has a set with its own standards and cut-score method has nothing to do with verifying a candidate engineering wealth knowledge in the specific subject area. The examination passing score method is based on unscientific method "the cut-score" A specific cut-sore number is typically selected by a board member. This passing grade "cut-score" number is based on an onion of a board member with intent of allow a specific number of examinees to pass. Typically, examines above the selected cut-score number passes and remaining examines below the number fails. The problem is that; selection of such number has no scientific data and has nothing to do with engineering knowledge of the tested subject matter; it has to do with the board members intentionally allowing only 25% to 35% of examines to pass per an exam session. This does not serve the public interests nor the current infrastructures needs in the civil engineering fields. It will be great for CA-board to adopt a system comparable to the national standard NCEES,
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6. cut-score exam evaluation method, recommending to restructure the civil engineering surveying/ seismic exam evaluation process so it can enhance the current poor method and statistical exam data based on substandard of cut-scores method. provide a scientifically exam evaluation system process that is based to testing the competency knowledge level of a candidate and eliminate the ongoing unfair cut-score selection method practices

### **Difficult Exams**

1. It should not be next to impossible to get an SE license. There are rumors that SE test writers protect their amount of work by writing tricks into the problems.
2. Scoring the exam and the difficulty has been variable down through the years.

### **Emphasize Experience**

1. In addition, decoupling experience from the examination is a MISTAKE. If a college graduate can pass a PE exam without any experience the Exam itself has failed. Recouple the exam to experience. Move experience to 4 years, no credit for being a research assistant at some UC to get a PhD, too many practicing engineers don't know what they are doing. Please fix. You are endangering the public. "
2. Some professional jobs, do not have rotation opportunities. Gaining the needed experience can be challenging for some positions--maybe allow some flexibility on qualifying experience.
3. Require 4 solid years of experience

### **Emphasize References**

1. The Board should pay more attention to reference letters filled out for each applicant. I have personally provided references stating the applicant is not qualified yet those individuals have been allowed to take the exam(s).
2. license application and references still on paper. add the license application and reference system to an online submission system.

### **Exam Availability**

1. More exam locations are needed throughout the state to provide better geographic distribution for applicants. Alternatively and preferably it would be good to see a shift to the availability of online examinations.
2. Needs more than 2 times a year for PLS exam.
3. More accessibility, more testing available and locations.
4. number of test sites and locations. it is apparent the central valley is very much ignored.
5. Availability
6. For the geologist examinations, its tough to have only one dedicated testing location for the whole state, whether it be in Southern California or Northern California. There should be more testing locations/flexibility
7. Timing. I think we should be able to test year round.
8. Lack of online exams for some licenses
9. Testing needs to be more frequent. It should be a few times a year or at will at qualified testing locations. Applications have gotten lost so there is some disorganization with paperwork.
10. The CA-PC based exam frequencies takes too long. Example, PE-CA civil engineering surveying exam occurs every 3-months, but an engineer candidate may able to take the exam once every, 4 tp 5 months, or 2/years. That is largely to do with a very lengthy exam evaluation processes. Caudate approval processes for an exam are too lengthy and inefficient once an engineer was approved to take an exam, another set of lengthy evaluations kiks in. these new evaluations should go thru a short verifications to ease the process. Also the cut-score method is takes too long in not a real science based method, it is designed to allow only 25% to 35% passing examines for each exam session, making it a competing exam between candidates not a verification of the engineering Knowledge in CA-surveying or CA-seismic fields.
11. Exams test the ability of candidate to be fast, not the knowledge of candidate.

### **Exam Content**

1. Geology exams could do better by including questions regarding geologic hazards and the forestry, this is a lesser used and known field but it is important and lacking on exams.
2. It was a long time when I got my license, but I've heard the tests are out of touch with the work that most geologists perform.
3. many civil engineers do not use the seismic material that they learn to pass the PE exam. I'd consider removing that testing requirement for certain types of PEs (e.g., water resources engineers).
4. Get more from real world, practicing engineers and less from academic sources.

5. Need to include more current topics than some older technology based questions.
6. The ASBOG exam for geologists needs to be supplemented by a California-specific supplemental exam.
7. State exams should cover different topics. They are too focussed on specific application (structural) and don't consider broad range of needs. Nor do questions/tests do a great job of checking actual skills in plan prep, spec development, etc.
8. Same as strengths - look carefully at the content of the examinations so as to determine basic qualifications but not so rigorous as to deter applicants.
9. The most recent Geotechnical License Exam had too many questions that had more than one correct answer that was dependent on where you work, Norcal or SoCal. Questions should be factually based with less opinion.
10. Testing is becoming less skills focused and tends more often to political and non-technical expectations. These expectations can be addressed outside of testing.
11. State specific test asks questions that are opinion based with not enough information. Specific task questions and 'which is better' questions should be avoided. No one 'PG' is deeply knowledgeable in all aspects of every technical process for all tasks in the state. If you wish to ask detailed task oriented technical questions, then references should be allowed. I constantly use and check state and task specific documentation to ensure that I am doing my work properly. Asking applicants to memorize ALL this information for the test is not reasonable and does not accurately represent how they will be conducting themselves in their every day job.
12. Some of the exam questions on the CSE are hard to understand--no legend or scale on maps, and/or poorly drawn figures can be confusing and misleading
13. The complexity of California geology is not fully implemented into the California-specific exam.
14. Exams should focus on California's unique engineering environment.
15. Exam materials can be pretty broad as compared to the exam itself.
16. Need to have a California specific portion for the S.E. exam.

### **Exam Feedback**

1. Is there a way to provide more feedback to test takers when they don't pass?
2. Not enough easy to digest feedback. There are a lot of opportunities to read upcoming legalese but not enough easy to read information.
3. Feedback on test results for licensees that pass the test, and continuing education.
4. Board should let folks know how well they scored on tests even when they pass, not just when they fail. It's important to know our strengths and weaknesses too.

### **Exam Relevancy**

1. Exam relevance often not current
2. Keep the tests relevant to modern real world practices.
3. The questions of specific exams such as surveying and seismic are not always aligned with practice of civil engineering
4. Licensing tests do not really provide good coverage of what is actually required to be an engineer. Should consider revamp of test questions. Test areas are good but execution could be better. Seismic test in particular is too focused on structural issues and does not cover other areas needed.

### **Examiner Quality**

1. Examiners need better training. I've seen examiners scrutinize ID but not look at the face of the person presenting ID also examiners hovering and pacing beside one examinee for 30-60 minutes, distracting that examinee.

### **Extended Exam Time**

1. Many questions on the test did not appear on any study guides. In the real world, you don't have 2.5 hours to make decisions. I feel the time should be longer.
2. All engineers know that should double check their answers and calculations but exam time frame was not designed for double check answers.

### **Fingerprinting Requirements**

1. Application is costly, and, fingerprinting is something I haven't had to do for 10 other states.
2. The fingerprint process seems archaic and unnecessary.

### **Higher Standards for Exam**

1. Make the professional exams harder.
2. They should make it harder for people to get licenses by making tests more stringent and require Continuing education.
3. Civil state-specific exam should be more stringent to weed out unsafe design.
4. don't allow the test to be dumbed down...demand high standards
5. Don't even consider weakening the standards to compensate for social challenges

### **Lengthy Process**



1. Length of time from first application to finish.

### **Low Standards**

1. The standards are a low bar.

### **Miscellaneous**

1. better description of what DOES NOT count as professional experience.
2. DCA meddling.
3. See comment in the licensing area.
4. recruit more item writers
5. simplify proof of work experience and rely on test results, minimize paperwork burden on the licensed
6. pushed responsibility of testing to testing centers. should be the old way. gather and test.
7. Updating licensing control
8. increase the standard of care for engineers
9. Applications appear to be a rubber stamp as far as applications.
10. Need more than 2 tests for state Specific PLS Exams
11. Mandate a statewide focused exam for licensure
12. The Board is run by a Land Surveyor with zero Law Education, zero Geological background and Zero Civil Engineering Experience.

### **More Online Services**

1. More online services would be beneficial and less dependence on paper mail/wet signatures.
2. Hope the Board is taking advantage of online web based intake of applications
3. Need all digital
4. Haven't transitioned from paper pdf forms to electronic
5. Need digital tests rather than paper.

### **Multiple Choice Questions**

1. Not enough professional experience is required to take exam. Multiple choice exams limit capability to test.
2. multiple guess exams
3. See prior comment on multiple choice questions

4. Licensed Professionals do NOT provide multiple-choice answers as services. Therefore problem solving skills should also be tested as before.

### **Not Applicable**

1. I do not have experience with Computer Based Testing. Nor have I seen example tests. So I can not comment
2. I don't know of any standards promoted by the Board for my discipline. Perhaps this question is poorly worded.
3. No comment

### **National Exams**

1. Overreliance on national exams.
2. "These are probably more in the realm of possible or potential weaknesses rather than real weaknesses - at this point in time. 1) There has been a trend toward standardizing professional examinations across many states and this is overall positive. However, as it evolves, there is a risk that some areas of expertise that are important for California could get less attention. The Board should be sure to get broad perspectives on the content of professional examinations as those evolve. "
3. Compare currently used national exams with previous state exams to determine whether national exams are sufficient to determine minimum competency. Develop metrics to determine whether examinations are effective in determining minimum competency.

### **NCEES Exam**

1. Tests used to be more applicable when they were created by CA engineers in CA. That was your strength. You no longer have that strength. NCEES exams at higher levels are joke.
2. The NCEES tests are weak. Candidates that cannot pass the exam by the third try should have to wait two years to retake the exam and submit new references from different licensed engineers.
3. Providing the licensing examinations. Even though NCEES has moved to the less effective CBT for most all exams just to save money. Endangering the public by lowering the bar so that more get over. Coupled with weak enforcement this is a problem.
4. Capitulating to NCEES
5. NCEES exams at higher levels are joke.

### **Overall Effectiveness**

1. Examination process offering during COVID was rigid and almost non-existent.
2. None. [Strengths]

### **Reciprocity**

1. No reciprocal recognition of licenses from other states. Legal requirement for a Civil license for any electrical project that is attached to the earth.
2. Allowing out of state licensees sign for qualification.

### **Require Continuing Education**

1. As I already indicated, I think that an hour of ethics training would be beneficial to constantly remind engineers that their first duty is to protect the safety and welfare of the public.
2. To ensure an up to date board, we should require continuing education. Our profession would benefit by requiring all engineers and surveys to stay up to date in their area of focus.
3. require some kind of continuing education such as other states have such as Indiana and Florida

### **Responsiveness**

1. Sometimes takes a while to get a response.
2. Time, the Board will get around to it sooner or later.

### **Test Results**

1. Publish the results sooner
2. The testing process appears to be working, however the methods of providing test results (in the case of failure) are handicapped at best. The results provided offer little to ne help to the tester in amending the studying methods.

### **Turn Around Times**

1. application review and approval turn around times.
2. long turn around time
3. Occasionally, the timelines for processing admission to examinations is longer than it should be. But this doesn't seem to be a chronic problem.
4. I think the application process could use some streamlining. The whole process spans months from the moment an application is sent to once it's approved and finally once you can actually sit for an exam. If you get unlucky you can find yourself waiting more

than 3 months before you can actually register to take an exam. The process needs to be streamlined somehow to make the turn around faster but also to make it so you can sit for a test sooner than is currently possible.

### **Unclear Process**

1. The one aspect of the application that isn't entirely clear from the information on the application and website is the estimated timeframe to receive a confirmation of review of an application and when it is appropriate to check in if you haven't received any communication regarding an application.
2. Complicated process
3. My experience in this area may be dated, but it seemed difficult to navigate the process
4. The process is very difficult for licensees to understand. The organization of the website makes find the information on it very difficult.
5. "rules have changed for applications since i took exam in 1995. a flow chart for current applicants would be helpful. I have to get younger engineers to help me understand rules. also on application form, there is a box for if you have not seen applicant's work, but still recommend. we had someone rejected because that box was checked. it would be good for applicants to know if checking that box will result in rejection, and then they can find other references."
6. Its just very hard to understand.
7. The application/examinations process since I was licensed has been weakened so that unqualified applicants are obtaining licenses.
8. The application for Licensing as a Land Surveyor was very difficult to complete, it took multiple weeks to finish. Sections were unclear as to properly fill-in or what information was needed.
9. Sometimes hard to determine the status of your application.

### **Unclear Requirements**

1. The question of whether or not all civil engineers need to take exams in seismic and surveying is problematic and should be evaluated.
2. Limit the addition of "red tape". Ask for what is needed to meet the level for a licensee to qualify.

### **Website**

1. Website is difficult to navigate. Difficult to know in which stage of the process the application is in. Online tracking and application process would greatly improve efficiency.

2. Better online resources.

## Internal Stakeholder Comments

### **Applicant Feedback**

1. Lack of feedback data from applicants after application.

### **Computer Based Testing**

1. Really good test takers will fair better on computer based test than paper based test.

### **Continue Connect System Roll-out**

1. Process could probably be sped up, will probably be fixed once Exams are implemented in the Connect System.
2. Applications - in addition to getting all applications into Connect system, working on streamlining applications and how to improve the processes rather than just duplicating the process.
3. Organization and file management will be improved with the Connect system.
4. Continue development of new system to have all license types able to apply online.

### **Exam Availability**

1. Had to cancel almost all the exams due to COVID. Even with CBT, there is still the ability to shut down testing, which makes it difficult.
2. Pandemic caused for less test locations.
3. More exam centers locations for testing

### **Exam Relevancy**

1. Promote appropriate standards, but not sure if those standards meet the current day challenges. Board could do more to push examinees to be better prepared to take on challenges of today. (social issues, climate change, etc.) Not sure if exams are including these challenges.

### **Exam Vendors**

1. Vendor for exams have had issues in the past, but relationship is getting better. May consider looking at other vendors.

### **Faster Exam Results**

1. Exam results - When the board gets exam results back from vendors, it can be slow to getting the results back to the exam candidates.

### **Improve Communication**

1. Improve on this communication with outside parties in terms of managing the application process.

### **Maintain Level of Customer Service**

1. Learning to re-invent self to best serve the applicant in the new environment. Currently working to overcome this.

### **More Clarity in Application Deadlines**

1. Could work on clear information on application exam deadlines - sometimes can be vague which can be difficult for the applicants.

## Laws and Regulations Strengths

The below comments are stakeholder responses to the question “Describe the Board’s strengths, or what they do well, in the area of Laws and Regulations”.

### External Stakeholder Comments

#### **Accessible**

1. very clear guidance and access to laws.
2. has them published and easily accessible

#### **Consistency**

1. Working to make regulations among the Board's professions consistent.
2. Consistent
3. Consistent regulations over many years.
4. Consistency in application of B&P code requirements.

#### **Consumer Protection**

1. Priority of the licensees to protect public health and safety above everything else is very clear in every message that comes from the board--this is nice

## **Customer Service**

1. Willing to answer questions and explain statutes, regulations, policies, and procedures.

## **Enforcement**

1. investigations time has been reduced
2. the board is good an coming down on their licensed professionals.
3. Enforcement has improved in recent years.
4. Discipline violators of laws and regulations.

## **Evaluates Laws/Regs**

1. I feel the Board continually evaluates statutes, regulations and policies. Many times after issues have been presented to the Board by professional memebbers, or group like the CLSA.
2. Reviews annually
3. Evaluate bills for potential effect on the Board and its licensees.
4. Commenting on and keeping watch on legislation.
5. Monitor complaints and deficiencies in the professional group and police potential violators of the board's laws and regulations.
6. Comment on pending legislation to enhance the professions. Also comment on poorly drafted or negative pending legislation to remedy defects.
7. The Board has been largely effective in combatting over-regulation from uninformed legislators with well-written responses to proposed laws.
8. Provides relevant review and reporting of proposed legislation
9. 1. The ability to make changes. 2. The ability to influence legislation regarding the profession.
10. Careful consideration of legal and regulatory requirements.
11. Statutes, regulations, policies, and procedures are easily attainable. Which makes review simply.

## **General**

1. They follow the letter of the law.
2. They provide updates to licensed practitioners.
3. Cleary identifies what a licensed profession can and cannot do.
4. Summaries on a monthly basis in the meeting agendas and minutes.
5. Investigate complaints and enforces laws and regulations
6. They have a comprehensive set of laws that govern the profession.

7. the Board appears to be making an efforts to uphold the laws and regulations set forth in statute.
8. Requiring licensed professionals to take responsibility
9. Updating rules and enforcement.
10. They investigate complaints and act appropriately when recommendations are made by their consulting technical experts.
11. Board follow all the rules
12. Enforce the state laws and regulations, publicize violators and their adjudications.
13. The laws and regulations are generally clear, and enforcement of violations is orderly. Where regulations come into question, legislative action is taken.
14. In compliance with the law.
15. Follows through regarding complaints
16. Well-described laws and regulations that can be easily applied.
17. Adherence and enforcement of staff decision making related to board related issues and Laws/regulations.
18. Solid focal point for discussion of laws related to professions within jurisdiction

### **High/Professional Standards**

1. Again, engineering operates at a high level of competency in California.
2. They do an excellent job of insisting on high standards and the rule if law.
3. The board has created higher standards than other states in the area of getting licensed.
4. Provides critical professional input to the legislative process.

### **Keep Licensees Up to Date**

1. Advanced notice of changes.
2. Put out a new book of laws every year
3. Your regular emails keep us apprised of present and changed/revised policies/regulations.
4. The Board communicates well with the licensees those regulating actions being considered, or that will be taken.
5. The newsletters/notifications that are send to licensees about changes etc are a good and effective way of getting input with the goal of keeping regs etc up to date. I hope that practice continues.
6. Communications to constituents
7. New/modified laws/regulations are made available through email notifications, and there is an ability to comment.
8. Keeps us informed on changes.



9. publishing updates and changes to rules often. Publishing sunset info often.
10. Generally good in providing info to allow registrants to identify impending changes in regulations.
11. Good public review process. Information about changes goes out to interested members & there is opportunity for input prior to changing regulations.

### **Miscellaneous**

1. YOU have CA Zoning Law, Govt Code, Subdivision Map Act, and some Water code laws behind you.

### **Not Applicable**

1. Maybe the Board is just too quiet about its successes. I have no idea if they are doing anything well.

### **Overall Effectiveness**

1. Board does a good job in keeping the laws and regulations current and appropriate.
2. Falling back on the code is adequate.
3. Good communications
4. Good legislative analysis
5. Good comments on prospective changes in laws
6. It is great to see the work done by the board on rules and regulations.
7. Excellent monitoring by staff of relevant legislation.
8. Are on top of legislation
9. I believe that the board is meeting their goal.
10. All good
11. Strong point

### **Public Awareness**

1. Does provide public awareness
2. Some publications are helpful for the public as well as licensees.

### **Relevant Laws**

1. They keep up with the times and the laws and regulations are a living entity that is evolving.
2. Keep abreast of a changing world.
3. Update laws based on current standards and needs, solicits stakeholder input

4. The Board has taken on initiatives to make sure laws and regulations are up to date and equally applied.

### **Responsive**

1. usually quick to respond to clarifications of interpretation of laws and regulations

### **Website**

1. well organized page
2. Good website resources
3. Available on the web site.
4. The resources for the laws and regulations are always easily available and accessible on the BPELSG website.

### **Well Defined Laws**

1. Well defined
2. The Business and Professions codes are defined.

## Internal Stakeholder Comments

### **Collaboration**

1. Great legal counsel and Attorney General's office.

### **General**

1. Board has a good handle on how to make sure laws/regs. are relevant, but not overstepping or over-regulating the ones already in place.
2. Do a good job in reviewing the existing laws and regs. and determining what ones need to be updated/amended.
3. The board is given a well researched and comprehensive assessment of laws coming or brought to the board. Laws and regulations are vetted quite well.
4. The rulemaking process is a strength.
5. Up to date with 2000 laws every year. Board does a good job of keeping track of the laws that do or might affect the professions the board regulates.
6. "Moderating state legislation and taking positions where necessary. How well the board adapts on the legal/regulation side to technology changes in the professions. "

### **Keep Licensees Informed**

1. Working to ensure the licensees are kept up to date on laws and regulations.
2. Do pretty well in referencing the law when they need to when communicating. Very important for registrars when they need to talk to applicants or enforcement subjects.
3. Communicating law changes and letting licensees know ahead of time.

### **Keeping Board Informed**

1. Really positive that the board has sharp folks who can interpret the laws and regs and summarize for the board members.
2. Qualified people. AEO is really good with the laws and regulations, and bringing items attention to the board.
3. Board does a good job in both tracking legislative bills that would impact the board and also bringing recommendations to the board on actions that should be taken.
4. "Very good at explaining what the laws are and where they need to be with them. Always try to run processes within a certain structure of what the laws and regs are, but don't actively look for loopholes. Try to modify the structure within the laws if they feel that something needs to be modified. "

### **Knowledgeable Staff**

1. Staff understand the laws and regulations very well.
2. Board staff, especially AEO, is really good at understanding what is going on with laws and regulations.
3. Staff does a great job of reviewing the proposed legislation, assembly bills, and state bills and explaining to the board in an easy to understand way. Knowledgeable staff that do a thorough job in reviewing the legislation.
4. Staff have a lot of expertise in this area. Very good at identifying the impact changes/proposed changes will have on the applicants/licensees.
5. Staff is knowledgeable about laws/regs to be able to explain them to licensees and members of the public.
6. "Senior staff are terrifically knowledgeable about the laws and regulations and consistently demonstrate their knowledge during board meetings. Very fine example of staff competency. "
7. AEO is very knowledgeable and very tenured with the board. Helpful with answering questions regarding laws and regs.
8. Board staff expertise and experience.

### **Overall Effectiveness**

1. Strongest area of the board.

2. Legal cases are applied very well and continue to do great legal work.
3. Board does well in this area.
4. "Always looking to see what needs/can be addressed. Being proactive is a strength."

### **Relationship with Legislators**

1. Working with state legislators to sponsor bills the board needs and to modify ill-conceived wording in selected bills not sponsored by the board.
2. Board has a good relationship with all of those who are involved in enacting/revising laws and regulations.
3. "Good working relationships with legislature and legislative staff. Work with them on bills to make sure wording is as clear as it can be and appropriate for the professions.
4. " Authorize negotiations with authors to make sure that bills do not negatively impact the board, public safety, and licensees. Board does a good job managing sunset process as well.

## Laws and Regulations Weaknesses

The below comments are stakeholder responses to the question "Describe the Board's weaknesses, or what they can improve on, in the area of Laws and Regulations".

### External Stakeholder Comments

#### **Advocacy**

1. No sure how the board ensures any of this once the license is received. Rely on the licensee and their character.
2. The board appears to lack the required funding to actually promote and improve Laws and Regulations.
3. Need to do more to promote the industry.
4. Supermajority politics hinder your ability to operate in regard to STATE projects, state funding, new reservoirs. You need a private advocacy group.
5. Fails to have (as in other states) a three person technical expert panel to determine if a violation occurred. Having only one person to pass judgement continues to be a failure because the one "expert" arrives at faulty conclusions as compared to having 2 experts agree in a majority decision, thereby it is highly likely they arrived at correct judgement.
6. In larger firms, management runs projects. The P.E.'s authority is usurped. Mgmt reassigns incharge PE at whim. Many times PE is only a "plan stamper". Need to develop laws/rules to prevent these occurrences.

7. You do watch the legislature, and try to fight for engineers, ls and geos, but do you really wield any power? With the fight to let anyone build a house anywhere, straining community systems such as power, sewer etc. Can you stop the attack on communities?

### **Better Clarification**

1. Some legislation needs further clarification
2. Some of the laws need to be written clearer, so there is no grey area. Should be easier and quicker to get a letter of clarification on the laws. Fines should be larger for companies that break the laws. There should be more public outreach on the law as industry moves in different directions.
3. Would like a better synopsis of laws, like commons rules that are broken, what to watch out for.
4. Does not provide "plain English" summary of new laws and changes and reason for them.
5. While the codes are defined, they are sometimes not clear how they should be interpreted or applied.
6. Standards are often left ambiguous and not well defined particularly with advent of technology.
7. Some regulations confusing; can be interpreted in multiple ways. Wording needs to be carefully rewritten otherwise can cause - depending on enforcement - can cause serious reputational and financial harm to licensees!

### **Better Education**

1. Professional engineers need to know that the licensing law is to protect the public not protection of the engineer.
2. The Board does not educate the regulatory agencies regarding the legal requirements that exist for supervision of design or be in technical charge.
3. Better public education regarding the roles of and public's need for professionally licensed engineers.
4. More training and advertise new laws and regulations.
5. There are still a lot of people that don't know about the laws governing the practice of engineering. While it is the responsibility of people to know the law, sometimes its a little hard to find out what laws affect your business.
6. Many practitioners and consumers don't know about specific regas
7. we are over regulated. too many young inexperienced or hardline licensees want to tell others how to ethically behave. they dont understand the creed of a Land Surveyor

therefore must regulate what should be natural and of the heart and soul of the surveyor.

### **Better Enforcement**

1. Enforcement of laws and regs.
2. very weak in enforcing
3. there are some dishonest engineers out there. it would be nice to have less of them.
4. The fines are too small, the warnings and no recourse to the perpetrators are too often.
5. There are many licensed professionals that do not adhere to the current laws as they are written. In my opinion there is A LOT of work that needs to be done to ensure that the current laws are being upheld and this does not appear to be happening. In most cases you do not even get responses from the board when you try to make contact to report concerns or violations.
6. some penalties appear to be little more than a slap on the wrist...bad performers need to be removed from the profession.
7. Enforcement can be improved.
8. lacking strengths in enforcing.
9. I trying to find a strength here....nope, I have nothing. The enforcement program is less than it should be. They BPELSG staff closes nearly 70% of their cases without action. It is a biased system that picks winners and losers.
10. don't be afraid to stick to your morals. permanently bar those who cheat the system
11. The Board should implement Business and Professions Code section 8720 and use the LSTAC committee to function similar to a tribunal on enforcement. The current system is uneven and unjust, completely inconsistent.

### **Collaboration in Regulatory Process**

1. Encourage professional organizations to be more involved in the regulatory process.
2. Lack of teaming with othe stakeholders to improve laws & regulations. there have been multiple grass roots efforts from surveyors to suggest legislation, but BPELSG has not engaged in compromise to move these forward. Compromise could result in an overall better framework for improving the weaknesses noted elsewhere.
3. Need to continue to speak with the professionals and take the input, and in some instances, introduce legislation or adjustments to Board Rules.
4. More involvement and consistency compared to other state boards for Engineers. More ethics and technical training to PEs.
5. The Board could work directly with licensees to determine which legislation should be promoted. Periodic (every three to five years?) the Board could engage licensees with a

take-home style test to ensure licensees have knowledge and understanding of current / new laws, rules, standards, and regulations.

6. you have no real power in the capitol. Politicians do not consult with you on potential bills affecting the public safety or our professions.
7. Realizing that technical execution depends on multiple, equal professionals working in unity
8. the exec. officer, a L.S., fails (over 10 years now) to contact the county surveyor for input when the county surveyor believes there is no requirement for a Record of Survey and approves the Corner Record document; while the exec. officer of board issues a citation or legal action for licensee who filed the corner record instead of ROS document. The board ignores this concern when land surveyors bring raise this failure to communicate to local county surveyor at board meetings.

### **Communication**

1. Very little communication on what the Board is doing in this area.
2. Communicate with licensee's
3. Providing details about what was changed
4. I would appreciate better communication on areas of practice. Years ago there was a list of 3 columns of practice areas but the board took that back. We do not necessarily know where we stand in all areas of practice.
5. revised laws and regulations aren't sent to those certified either by mail or electronically. Only those signed up received the notice. Anything impacting all licensees should be sent out annually to all.
6. Need better communication with licensed individuals updating them on changes in laws & regulations
7. customer services is problematic, it is hard to get to someone for responses and or get appropriate professional help within normal timing. emailing systems is usually late or irresponsible
8. "Misinformation and lack of communication about changes in policies and procedures with the licensed professionals. Board needs to make sure all regulations and policies reach professionals. Board is ineffective in that regard. "
9. Should promote/highlight an area of the law in each quarterly news letter.
10. Do not listen to the Professionals. Their decision is always what is best for the Board.
11. Outreach to other state agencies...water boards, GSA, etc, could improve.
12. Ensuring the latest laws are available to members.
13. Provide a better vision of the potentially upcoming changes that may impact your licensees.

14. I am not aware of what the board does since this is not communicated to us.
15. There is good enforcement but well-explained notices back to complainants are not good.
16. "Generating a web-based FAQ section for the annoying questions we get from uninformed plan-check staff would be helpful. Such as:
  - > We do not have to stamp and sign every page of calculations or reports
  - > If a license was valid when the plans were stamped, but expired prior to plans being submitted, the plans do not need to be stamped again
  - > Licensee's signature does not need to be placed over the seal (if this is indeed the case)"

### **Difficult to Locate**

1. Occasionally these changes can be buried in voluminous board agendas, making it an effort to dig them out.
2. The laws and regulations can sometimes be hard to locate, it would be helpful if the laws were more prominently displayed on the BPLESG website

### **Inconsistency in Requirements**

1. I have seen inconsistency with rulings pertaining to infractions by a surveyor. The interpretation of some sections of the Professional Land Surveyors Act is solely that, their interpretation. The Board does not value other interpretations which may be valid, as outlined in the Professional Land Surveyors Act.
2. Misapply existing laws and rules
3. Serving the CEs and no one else
4. Surveying is very limited for engineering license, yet there is a separate surveying test in order to be licensed. This is a small portion/ability of the license yet there is a 2.5 hour exam? Why?
5. Be more inclusive, e.g., better use of TACs, on addressing our changing environment.
6. The board does not review for the correct license required by CA state agencies. CalGEM requires a civil engineer to sign UIC submittals; the correct license is Professional Petroleum Engineer.
7. need to treat title acts and practice acts for PEs the same. the law and regulations should govern the title acts so those folks can properly evaluate reports that pertain to their specialty. For example, it doesnt make sense to ask a civil engineer to evaluate a subsurface project like an Underground Injection Control project. The practice act folks go through the same rigour as the title act folks--only difference is the regulations dont govern title acts and it just doesnt make sense



8. Vetting of out of country education and experience is questionable. I worked for the State for 29 years where many PEs were educated out of the USA. I worked with many and had my staff attempt to build the designs they provided. I suspected that many licenses were granted to some of these individuals fraudulently.
9. The Board should allow the structural exam to be taken by civil engineers at any time and waive the SE reference requirement.

### **Job Encroachment**

1. Over the past decade, other State departments have been carving out mini-professional licensing designations with substantial overlap to engineering practices (CGP & IGP SWPPP, OWTS). The Board has not been as effective in explaining why these designations are allowing non-engineers to practice engineering with alternative State-endorsed designations.
2. The board does not enforce the Professional Engineers and Professional Land Surveyors Act. Often contractors and utility locators are performing topographic surveys and providing the data to engineers for design. When a complaint is filed with the board, little to no action is taken. As long as no action is taken, the contractors and utility locators will continue to break the law.
3. We need to aggressively pursue revoking the Contractors License when they perform work outside of their professional services.
4. Board should speak out when other state agencies try to illegally regulate the practice of engineering in building codes. Similarly there is a problem with local building departments that try to regulate the practice of engineering

### **Misc.**

1. Please see above.
2. Stop sending letters "You may owe the State taxes" as I work out of state exclusively. You do not need to do the collection work for other agencies. Just stop it!!!
3. DCA meddling.
4. same comment about Practice Act PE's
5. The Board should be sunsetted by the legislation and executive branch
6. The mission of the Board: to protect the public should be re-evaluated in light of how business is actually conducted. In light of this, the need for this Board is debatable to ensure conformance with State Law.
7. Stop listening to the divisive Orange people
8. Appearance that Board relies on CLSA or other professional associations to initiate laws and regulations

## **Not Applicable**

1. I haven't been exposed to how the Board ensures this goal. My only interface has been with maintaining my PE license.
2. NA

## **Overall Effectiveness**

1. None [Strengths]

## **Protect Against Unlicensed Practice**

1. Strengthen efforts to protect against unlicensed practices, "rent a stamp" use, and support licensees who receive pressure from unlicensed individuals to change decisions.
2. Even though there are open egregious infractions by Contractors against the statues for professionals the Board turns away from enforcing the statutes when formal complaints are filed.
3. Enforcement of non-licensed surveyors is a challenge
4. Very weak / poor at regulating the construction industry who regularly perform land surveying without a license. The board is quick to regulate it's own (which is good) but ignores the unlicensed performing land survey work
5. Poor job on enforcing and investigating violators of rules and regulations. There is no fear of retribution from anyone illegally practicing land surveying.
6. There are too many examples of the board NOT stopping the contractors from self performing construction staking. The current system needs a complete overhaul.
7. The greatest risk to the public is unlicensed practice. Unless the Board can go after individuals and companies who are doing work outside of the law, then this will be a continual weakness.
8. I think the board should go after unlicensed individuals more strongly.
9. too bad they are blind to the unlicensed.
10. Inadequate enforcement of geology practice regulations. Non-licensed persons often practice geology without license, often in lawsuits/expert work.
11. Very little done to address this substantively and while licensee enforcement can be robust and aggressively pursued by fellow licensees, unlicensed surveying is for all practical purposes unregulated.
12. Force government to require licensing in all aspects of engineering the same way doctors have a monopoly on all medicine and lawyers have on all legalities

13. Make CalGEM abide and follow the licensing standards. They have dozens, maybe hundreds, of engineers and geologists who are not licensed to practice, yet they practice engineering and geology every day.

### **Regulation Timelines**

1. The length of time it takes for a regulation to be approved
2. The board takes forever to reach decisions

### **Relevancy in Laws/Regs**

1. Recent efforts in laws and regulations have been largely administrative, especially focused on the Board itself. This is not particularly relevant to practitioners.
2. The Board overextends their authority on land surveying legislative matters. For example, the California Land Surveyors Association - being the representative organization of land surveyors in California - has experienced the Board work to stop legislation by CLSA or supported by CLSA. The Board licenses land surveyors, they have three surveyors i.e. one Board member, a Registrar and the Executive Officer. CLSA has 22 chapters, 45 Directors and approximately 1200 members. An organized bill that has been vetted through the CLSA should not be sidelined by the Board. The Board's input is welcomed, but should not serve as the voice of the profession.

### **Require Continuing Education**

1. A significant weakness of the board is not requiring licensed engineers to take on-going classes / training to remain current in their given discipline.
2. Get feedback to the professional community and require continuing education.
3. I agree with this goal at the outset of licensing but it falls short by not requiring continuing education (PDH) to renew licenses.
4. Most other states have enacted PDH (Professional Development Hour) requirements, but California seems to be behind in this

### **Revise/Update**

1. Encourage the survey profession and legislators to revise/update statutes so as to raise the bar on the profession.
2. In the area of building specific civil/structural more should be done to ensure appropriate expertise of licensed individuals. Expanding Areas that require Structural licensure would ensure that expertise.

3. Better professional engineer education requiring regulations and resources for professional engineers.
4. California Title Act registration policy does not make sense to P E's from other states, but the Board seems reluctant to look at change. The same can be said for continuing education.
5. LS Act needs some serious updating
6. Section 6746 of the Professional Engineers Act needs to be changed to require telecom system design involving underground construction in the public right-of-way be done by licensed Civil Engineers. As a Civil Engineer since 1984 and, after 17 years working on permitting many of these types of projects for a public agency, I feel very strong about this.
7. The Board needs to review current rules and regulations that are based on existing laws and offer legislators assistance in curing defects and expanding regulation where warranted.
8. over emphasis on laws and regs when assessing competence and not enough on geologic competence
9. The board needs to work to increase the effectiveness of the legislation in regards to surveying.
10. Slow to react to evaluate the adequacy of current regulations

### **Staff Knowledge**

1. The staff does not seem to understand the statutes, etc but merely interpretets them as they wish. The policies are written to make the staff's job easier, not protect the public or aid the profession.

### **Stamps**

1. Strengthen efforts to protect against "rent a stamp" use
2. Stick to what matters, don't waste time and money on crap like mandating licensees "stamp" their work. A signature and license # is what matters, not a fancy stamp.
3. Direction and policy on use of electronic signatures would be quite helpful. I'm sure my stamp and signature will be forged at some point or another.

### **Understaffed**

1. The Board seems to be understaffed and overworked.

## Internal Stakeholder Comments

### **Collaboration**

1. "Continue dialogue and relationship with special interest groups. Continue to educate the legislators who have minimal levels of intelligence, but have an agenda to put laws into place that they expect the board to direct that may not be applicable or effective."

### **Irrelevant Legislation**

1. The board is impacted by lots of legislation that may not affect the board directly, but takes up a lot of staff time to determine if it affects the board.

### **Law Interpretation**

1. "AB 566 - ""Skilled Trained Workforce"" Would like to go and see what the board thought about this law prior to it going into effect. Disservice to the licensed individuals. Laws that protect union jobs at the expense of taxpayers. Need to think outside the box and see how laws could potentially be misinterpreted. "

### **More Proactive with Technology**

1. Anticipating changes a little ahead of time. Trying to be more proactive on those technology changes in the profession as they are coming.

### **Prioritize Bill Content**

1. The board and staff, especially staff, should consider the content of the bill or law before worrying about the author or who is sponsoring the bill. Board sometimes gets caught up in who the sponsor/author is, and not the actual intent/content of the bill.

### **Regulation Approval Timelines**

1. Reducing the length of time it takes to get regulation approved.
2. Better prioritize of time when making changes to regulation and handling other workload.

### **Slow Rulemaking Process**

1. Sometimes fall behind on the rulemaking (regulations). Sometimes are slow when getting the rulemaking package together and getting it processed. Need to be more on top of regulation changes when the board knows they are coming.

2. Amount of time it takes to process changes in regulations. Takes a really long time. Not necessarily the board's staff fault. Would like to see improvement, especially on regulations/policies/procedures.
3. Shorter timeframes for the rulemaking process.

### **Succession Planning**

1. Current AEO will retire at some point and will create a vacuum for knowledge and expertise. Board needs to ensure succession planning for her role.
2. If the board lost the senior staff, they will be in trouble. Need some sort of succession planning.

## Enforcement Strengths

The below comments are stakeholder responses to the question "Describe the Board's strengths, or what they do well, in the area of Enforcement".

### External Stakeholder Comments

#### **Communication**

1. Provides information on violations of laws and rules
2. The BPELSG has a good record of outreach on the enforcement program.
3. Response to consumers.

#### **Enforcement Postings**

1. It is good to publicize violators and their fate at the hands of the Board. But for every one that you catch, there are a hundred that you miss.
2. My only exposure to enforcement is the board's newsletters. No other perspective
3. "Posting violations"

#### **Fair Enforcement**

1. it seems there is a "healthy" fear of BPELSG enforcement - not worried about "witch hunts", and the practice isn't running amok. Seems to be a good balance, though, if I hear complaints is about folks that should be subject to enforcement actions.
2. Enforces the law on those violators who are caught.
3. Honest and just implementation of enforcement actions.
4. When identified swift action is taken to resolve offense & deter future occurrence.

5. Fair even handed administration of rules and regulations.
6. Consume' complaints are heard and if found to be true, the board takes action on the professionals.

## General

1. Willing to do outreach on enforcement
2. The board properly enforces various regs as it relates to licesnsed professionals.
3. Continual enforcement of Professional Engineers Act
4. They provide a forum or enforcement program to keep profession equal for all. Create an agency where the consumer or professional is treated with same level of respect.
5. Follows through regarding complanits
6. Maintain a minimum standard of care through licensing
7. investigate complaints and enforces laws and regulations
8. Sets a standard for care
9. Listen
10. By being a combined board for engineering, geology, and land surveying, additional resources are available for compliance case investigations and legal actions.
11. They can administer fines and discipline for those breaking the law.
12. Aggressively pursue facts regarding a lincensee's alleged malpractice
13. Investigation of violations by licensed individuals
14. The Board follows up and processes all complaints.
15. They do evaluate complaints, and act on infractions made by a surveyor.
16. Does enforce
17. are one body that unites us and examines our peers together as a common group..
18. Enforcing licensed practice.
19. reviewing the consumers' complaints against licensees.
20. Active enforcement program based upon current practice.
21. The Board can review licensees activities and revoke or suspend licensure where professional standards are not being met.
22. The board regularly takes disciplinary action against individuals.
23. They investigate complaints from the public
24. Investigates complaints, issues disciplinary action
25. Professional registration.
26. Reports what violations occur and the outcome
27. Address all credible complaints
28. They actually perform some enforcement.
29. You have an enforcement department.

30. Provides enforcement and allows the professional to defend himself.
31. The Board does take on enforcement and they report on it as part of their meetings.
32. Most areas of oversight, budget and closed session deliberations.

### **Improved Process**

1. enforcement is improving.
2. Process is very methodical

### **Miscellaneous.**

1. When City Engineers are not fired for doing Enforcement, as in one Sac suburb, the independent engineers do the job very well. One city has not sent CEQA an Engineer Sealed Signed Report for any of its vast expansion south of a major freeway near Sacramento. PRA Requests for city engineer approved plans have been ignored for decades -- and it shows. July 18 2021 Sac Bee front page.

### **Overall Effectiveness**

1. responsive
2. Manage the enforcement well.
3. they do enforce
4. Have a fairly good enforcement process
5. I think there is a robust enforcement, which is absolutely required to justify registration.
6. Will take complaints and investigate
7. Again, engineering in California is done well.
8. Set the standards
9. great at enforcing against PLS's with complaints
10. The Board appears to do well at evaluating and enforcing of "misbehavior" claims and complaints.
11. Enforcement is usually sufficient
12. They do investigate thoroughly, and are effective.
13. Board's strength is a good consistent process and effective use of licensed professionals to support review of cases.
14. Cases of enforcement seem to indicate that it is being handled well.
15. I can only assume this is well done, but I have not known or been associated with anyone who has been subject to enforcement.
16. The board is meeting their goal
17. Adequate effort



18. The Board provides effective enforcement of regulations of professional practice in California.
19. Haven't observed a weakness
20. Not sure what their weaknesses may be.
21. As a rank/file licensee who has not run afoul of the regs, and has not served on any sort of committee to examine complaints or allegations of malpractice, I don't have much insight to this area. Even summaries of actions are too general to help one ascertain potential weaknesses or strengths in this arena. So - I trust that the Board is effective in this area.

### **Protection Against Unlicensed Work**

1. Protect against unlicensed work, especially pressure from outside / unlicensed individuals.
2. I appreciate the Enforcement system. In my line of work there are a lot of folks that call themselves "professionals". Fortunately I work in a field that is protected by licensure so those that are not can be held in check. Some of my co-workers, in other fields of practice, are not so lucky and routinely have issues with self proclaimed "professionals".

### **Public Protection**

1. Public Safety
2. Protecting the public, is paramount. The board does this well, with prompt, fair enforcement.

### **Regular Email Updates**

1. Again - because of your regular email updates, I feel the Board is on top of enforcement!!

### **Responsive**

1. Responds to complaints in a timely manner

### **Staff**

1. Competent staff with good working relationships to other State organizations that work on investigation and enforcement
2. The Board staff is good at getting results, usually by threatening to open a case against a witness if they do not provide information and comply.

3. The board employs code enforcement analysts who are truly hard working and conscientious.
4. Knowledgeable and excellent staff.

### **Subject Matter Experts**

1. Has a good source of subject experts to evaluate enforcement needs and actions

### **Transparent**

1. The enforcement process is transparent for those involved, and the Board has come relatively up to date with its cases.

### **Unlicensed Activity**

1. focusing on unlicensed practice

### **Website**

1. Availability of info on the web site.

### **Internal Stakeholder Comments**

#### **Consistent Rulings**

1. Since the previous strategic plan The board has demonstrated consistent levels of applying interpretations of discipline. Staying consistent no matter who is working. Lots of collaboration. Trying to stay true to those law and regulations.

#### **Diverse Board**

1. Board members are very diverse in opinions and give a lot of discussion on how strong they want to enforce discipline.

#### **Fair Enforcement**

1. Board tries to process the complaints fairly and efficient. Do not automatically assume. Help to educate consumers and licensees so violations do not happen again.

#### **Follow-Through**

1. Take all complaints seriously. When the board acts, they may move slowly, but they follow through.
2. The board takes all complaints seriously, respond immediately, and follow through to completion - whether it's a case closed or actual enforcement action. Speaks well of the board's enforcement powers. "
3. Board does a good job in follow up. Is not too harsh.

### **General**

1. The board does an extremely good job at regulation offenders.
2. Enforcement activities are thorough and deliberative to a degree.
3. "Facilitating the receipt and investigation of complaints. Publicizing the outcome of closed cases that can educate licensees and head off similar behaviors. "

### **Investigation Process**

1. Staff has done a great job in improving investigation process.

### **Knowledgeable Staff**

1. Staff is so knowledgeable and helpful. Information provided to the board members are well organized and easy for the board members to navigate.

### **Overall Effectiveness**

1. Overall does a good job.
2. The disciplinary process and methodology has been working well for the board.
3. Board does not need to micromanage at all. Everything moves like clockwork.

### **Reduction in Case Timelines**

1. Biggest strength is that over in 5-6 years, days to close a case as reduced dramatically. Made a lot of progress in resolving things a lot quicker. Made huge strides in improving time cycles.
2. Manage good timeline of cases.
3. Board has done a good job in bringing down the number of days to close an investigation.

### **Responsive**

1. Responsiveness for communication - calls and emails that come in. No two enforcement cases are the same. Turnaround time for responding to complainants is great - 24 hours.
2. Very communicative and transparent with public and licensees. Very accessible. Very responsive.
3. Give ample time for response for those with enforcement actions.

## **Staff**

1. Staff have improved with doing a more coordinated and effective job with outstanding cases. Saw a reduction in age of cases and increase in resolution of cases. Board seldom needs to look at enforcement reports as they are satisfied with the work done.
2. Increased competence of the staff and their performance of the work.
3. Enforcement Manager does really great job managing caseloads. Enforcement staff are really good.
4. Staff in enforcement unit care about processing the complaints and helping consumers and licensees in trying to resolve things in a fair and reasonable manner. Good SMEs and technical experts who help review evidence in investigations.
5. Board staff has a good balance in ensuring public protection and giving the licensees due process, and being reasonable with being able to respond to inquiries and allegations.
6. Board staff works well with AG's office and investigators.
7. "On top of investigative cases. Great enforcement staff. Enforcement manager does an amazing job and does a great job helping the board get through the enforcement statistics. Great staff. Deepest appreciation for the staff. "

## **Well-Researched Enforcement**

1. "Board does a good job in determining the level of enforcement that is appropriate. Doing the necessary amount of investigation to determine this level. "
2. Enforcement is thoroughly vetted and researched.

## Enforcement Weaknesses

The below comments are stakeholder responses to the question "Describe the Board's weaknesses, or what they can improve on, in the area of Enforcement".

### External Stakeholder Comments

#### **3rd party Understanding of Profession**

1. I also have personally acknowledged that the selected judges and/or states representative many times do not understand the fundamentals of the science of the specific profession of which they are involved. This is simply a huge waste of time and which may lead to an erroneous conviction/non-conviction of the defendant in a case. I would like to see this change for the betterment of the professional and protection of the general public.

### **Accountability of Professionals**

1. Health & safety do not apply to survey applications. I can only recall seeing once or twice where statutes mention the protection of property. Revise the statutes.
2. Noting that in many states a P E is less confined to a discipline, the California Board at times seems less interested in whether the engineering was competent than the engineer's discipline.
3. making agency's comply with preservation. Holding Engineers accountable for disregard of preservation.
4. Many advertisements in publications for engineering services do not include the licensed engineer's name and license number.
5. increase the standard of care
6. This would be difficult, but it is widely known that PG/CEG in companies tend to use whatever mean they can come up with to get a project approved with a local agency. Specifically I have reviewed many reports in the City and County of Los Angeles that are that way. Could you have an anonymous reporting process so that you could look into possible pro-developer biased reports and outside reviews?
7. How could the Millennium Tower San Francisco disaster be prevented from occurring in the future? So far the Millennium Tower building has sunk 19-inches and tilts 14-inches. Seismic upgrades are needed prior to a major earthquake to keep people safe. Professional engineers should be pushing for improved safety while it can still make a difference.
8. There is a need for more detailed guidance on surveying and mapping that can be performed by a PLS compared to what can be performed by a PE
9. Surveying exam should be allowed to PE licensed professionals.

### **Communication**

1. more open communication
2. Board is difficult to get in touch with with regard to potential complaints.
3. Unwillingness to address e-mails and calls concerning complaints. The communications I have had with the Board remind me of dealing with any other municipal organization.

4. In most cases you do not even get responses from the board when you try to make contact to report concerns or violations.
5. I get no response when I file a complaint
6. No communication on pending or completed investigations
7. Better communicating to citizens the function and limitations of the board in terms of customer satisfaction.
8. Importance of licensed geologists not communicated, enforced re public safety
9. Be Open!
10. I am not aware of what the board does since this is not communicated to us anymore. There used to be a publication that told of violators of the law were handled.
11. Better communication and support on cases of need to address departures from regulatory requirements, should exist and be well communicated.
12. How can one tell, not an open process, kick out the lawyers.
13. Promote new or have reminders of laws in the news letter
14. Poor communication
15. Be more receptive to complaints from licensees, which in the past have discounted by enforcement staff as nuisances when serious issues were being raised.
16. Same as above. Although effective Board staff should not have to threaten an investigation when a licensed witness is slow to comply, The Board staff is good at getting results, usually by threatening to open a case against a witness if they do not provide information and comply.
17. Quick to accuse

### **Consumer Awareness**

1. Make consumers more aware through various communication methods of the enforcement activities, especially those individuals found in violation of laws/regulations so consumers are aware of those individuals.

### **Education of Enforcement**

1. Keeping the profession informed about the complexity of the enforcement process
2. Board does not inform license holders of their enforcement actions against others.
3. Need to disseminate enforcement actions more widely to warn people against unauthorized practice
4. Make sure to communicate laws and policies, so they reach licensed professionals. Make sure any changes in policies are communicated.
5. "The Board doesn't communicate effectively about its enforcement program, which substantially reduces its deterrent value. Yes, the newsletter has lists of names and laws

or regulations that were allegedly violated, but as a licensee, it would be helpful to have a one- or two-sentence summary of each case, in specific terms, to know just how people are getting into trouble. This would help licensees avoid similar offenses: it can be easier to avoid doubtful conduct, if you can remind yourself--or the person asking you to do it--that the Board has caught and punished others doing the same thing.

6. Provide or implement a Professional Development standard of ongoing training
7. Distribute to pertinent licensees results of enforcement actions & their outcome
8. It would be helpful if the board published in the newsletter an expose regarding the actions that the board has taken against license holder so that others can learn about the issues.

### **Emphasize Public Protection**

1. The Board also needs to make clear that its enforcement priority is protecting the public at large from incompetent practice. That's the reason the Legislature created the Board and the licensing system, not to provide another forum for adjusting commercial disputes between licensees and their clients, which can be handled in the courts. The people killed when the St. Francis Dam failed weren't "consumers," they were the public.
2. no ongoing evidence that PEs are protecting health and safety of consumers after examination.
3. The Board represents their own interests, not the interest of the State of California

### **Fraudulent Practice**

1. Again, it fails to capture those practicing in other technical areas outside of the scope of their license. It's important to note that I am not referring to those practicing without any type of license and fraudulently claiming they are a licensed professional engineer.
2. look into fraudulent lawsuits, filing to sue without a good cause and protect the engineers better. It is known that the mitigations and statements required on a Survey Map or Subdivision are excessive, particularly Orange County and San Jose. Lots of plan check by 3rd parties, and the Board should clean this up.
3. They are not empowered to be effective, when brought a clear fraud case and identity theft use of an engineer's license illegally, they could not pursue because this unlicensed individual closed the business and started a new one. Enforcement said hands were tied due to the business being closed. Lame. Local DA refused to prosecute.

### **General**

1. The Board should enforce all of the Professional Engineers Act.

## Harsh Penalties

1. Licensees can be punished for minor infractions.
2. Maybe an engineer is considered guilty until proven innocent in hearings.

## Inconsistent Rulings

1. See Section 1. Board maximum penalties treat someone who willfully impersonates an engineer the same as an engineer who makes an error. The former is a crime, the latter is an error. The penalties should not be the same.

## Ineffective Enforcement

1. Although several complaints have been filed against egregious offenders the Board fails in any enforcement thereby failing to protect the public.
2. The board provides little to no enforcement. There is no value in filing a complaint because all it does is upset the client and the person who is breaking the law will have little to no penalty against them.
3. Practically zero enforcement of any violations of rules and regulations. People illegally practicing land surveying have no fear of BPELSg.
4. "does not enforce or go after none licensees. does not want to implement new licenses to help protect the public. Should implement registration of Company who preform Surveying Services. Require annual renewal for company. "
5. Not exactly sure how effective the enforcement process is
6. More "teeth" are needed so when large corporations violate the law the punishment has impact. If a large corporation or entity considers the punishment nothing but an inconvenience then they will continue their illegal behavior.
7. There are many licensed professionals that do not adhere to the current laws as they are written. In my opinion there is A LOT of work that needs to be done to ensure that the current laws are being upheld and this does not appear to be happening.
8. Does not prosecute use of "Enginer" or "Engineering" by non professionals
9. "The BPELSG washes approximately 70% of the complaints submitted. In the professional community the enforcement program is scorned and thought to be a joke. It takes effort to file a complaint, sometimes wait 2-3 years, only to see no citation or move towards revocation. It is disheartening to future complaint filers. The enforcement, lack thereof, is well known in the land surveying community. Has the Board ever wondered why land surveyors have an many complaints as engineers, but make up less than 10% of the licensees? Executive Officer, being a licensed surveyor, is a deterrent to the enforcement program. A state bureaucrat, not a licensee, with an



enforcement background, like a hearing officer background, would better serve the enforcement program. "

10. Should have fines for violations, often seems lenient and allows reinstatement too soon
11. Very low penalties and remedial mandates
12. Also, a civil practicing in the structural world made identified 34 errors according to independent 3rd party enforcement review. board recommended license revocation, that person still practices in the world of structural design today with a plea bargain that allowed them to keep their license even though they have no training. again two years is not long enough to protect the public. So the enforcement doesn't do anything if you just get to get your license back because you promise to be good, pay a few grand to cover investigation and go to a college class. Also, who verified that the person was informing clients of their probation status? There needs to be a clearer way for the public to identify BAD engineers (and LS and geo) right? why do we hid it inside a license lookup that literally no one knows about in the public?
13. Be less of an administrator and be more involved in what you are enforcing.
14. I feel they could work with the private surveyor more when infractions are discovered. Administering a fine isn't always the best avenue when the private surveyor attempts to correct their infraction(s).
15. Never allow those who cheat the system to gain re-entry. This is an insult to those of us who worked hard to qualify and even harder to practice in a compliant manner.
16. Enforcement can be improved. How many violators are not caught?
17. If I thought the Board would do anything, I would give more details. I (along with others) complained about an individual who was never disciplined. I went to a Board meeting in Sacramento (driving from the Bay Area to attend). A board member approached me individually during a break, assuring me that he was concerned and would contact me individually about the case. I never heard from him.
18. Enforcements are not to favor the "consumer" over the professional. Base enforcements on verified facts.
19. Need to expand on enforcement to ensure that private and public sector professional engineers are following the professional engineer regulations and legal requirements and have greater penalties when issues arise.
20. I have seen very poor plans for telecom projects prepared by non-registered engineers. Some are so poor the engineers should receive disciplinary action. However, since telecom plans are exempt the Professional Engineers Act, no enforcement is possible.
21. Do a very poor job of regulating unlicensed practice.
22. "Enforcement is not perceived as effective, especially in enforcement of unlicensed activity. Actual Board authorization and your budget is still contingent on legislative action-out of the Boards control."

23. Unlicensed engineering activity is not discouraged enough based on Board's own statistics. Other jurisdictions report 80-90% complaints/prosecutions for unlicensed activity vs. complaints against licensees. Whereas CA reports 50%/50% proportion.
24. The Board acts mainly as a fee collection entity with implementing no meaningful enforcement against those who openly ignore its rules and regulations. The Board is more concerned with not upsetting Contractors rather than protecting the public by policing what should be professional activities performed non-professional licensed contractors.
25. The board fails in identifying those practicing without a license. This includes services provided by professionals licensed in unrelated technical areas that are working outside of their scope and in fact practicing professional engineering. Failure identifying and stopping this activity places the public at risk, depreciates value of license and stature of both the board and its members.
26. Does not protect the work of a licensed professional (or the public) by allowing unlicensed to perform survey work. Many complaints, no action by the board. The profession will die if something is not done.
27. There is no enforcement by the board. When complaints are filed, we are told that the board has no jurisdiction over unlicensed people. If we file a complaint, we are risking losing a client and rarely get any support from the board.
28. Very weak on enforcing the rules/laws against non licensees and contractors who perform surveying services for their clients.
29. Dissemination of actions citing people for unauthorized practice.
30. In my experience, the Board does not enforce the current laws. In most cases they hand out warnings and "hand slaps" to licensees and do not go after any offenders outside of their authority. In MOST cases these offenders fall under the DCA umbrella.
31. Improve enforcement of non-licensed practice
32. very weak on complaints
33. There are non offenders of bad engineering practices and it appears that it is difficult to report them and effect change. Our local county has a "black list" yet these engineers still practice freely
34. Complaints should be reviewed by a panel.
35. At times the process of addressing complaints can be similar to a star chamber court where maybe the Board's expert should be disciplined for incompetence. Not proper oversight of "experts" the board uses.
36. Enforcement. I was involved in an enforcement case where several other licensees had complained about an incompetent engineer. The time taken, and the lack of discipline or consequence was appalling.

37. Enforcement, for example, if a Civil engineer is practicing outside their area of specialty, and are found guilty of doing so, and you take their license, don't give it back and let them continue to practice in that area, restrict areas of practice at least if you can't take it fully even though the AG recommends this. I mean this is a very specific example because it happened.
38. Enforcement; seemingly not consistent; needs much improvement. Often used by attorneys in litigation as a vehicle to promote their own case
39. Has to be some oversight so you were tasked with it. I just the professional society would take a larger role in overseeing their profession.
40. Sometimes the board is overly strict in the interpretation or enforcement of rules. For example the board has rules for geologists that require certain education and do not have an experience alternative route.
41. enforce compliance with monument preservation. with Countys and Citys. monitor private construction for same or punish reckless destruction of monumentation.
42. There is a lack of compliance with Building Code requirements for Inspection, Observation and Construction Quality control by Civil and Structural Engineers and by Building Departments. Come the "big One", and it is inevitable, all governmental agencies, including the Board, as well as professional Associations will be strongly criticized for the extensive structure damage and loss of life that for certain will occur. The recent Florida condo collapse will look like child's play.

## Miscellaneous

1. See comments above
2. DCA meddling.
3. Also, if i want to lookup a contractor, i can look up their bonding company and insurance. I cannot do that for engineers. It should be a database for consumers to know if they carry proper professional liab insurance, workers comp etc. Consumers are not protected without this knowledge.
4. Only one or maybe two members of the large engineering, land surveying and geologists Board are practicing geologists. The geology profession appears to be deemphasized in this Board configuration.
5. The present political climate is hostile to practitioners of science and technology. The Board members are political appointees. Even worse, the professional societies NSPE and CSPE, have become totally dysfunctional. There is little that can be done to remedy these issues.
6. Get some private advocates involved, so they can learn more Engineering Duties, and find Journalists to spread the word about this state govt's failures.

7. feeling that Board hunts down licensees to keep enforcement numbers high to satisfy sunset provisions, sometimes punishing minutia.

### **More Proactive Enforcement**

1. We do see anyone checking on unlicensed practice. We do not see any enforcement that is detouring unlicensed practice. If this continues the public will be in great danger as contractors continue to survey projects with no professional surveyor to provide quality control for the public.
2. Reactive approach in dealing with agencies that have not filed or updated Notice of Department Designation forms
3. The process is complaint-driven which is inherently uneven.
4. Not going after people who are protected by City connections.
5. Reactive rather than proactive
6. It seems to take a mountain of complaints and evidence to get the Board to act on professional violations.

### **Not Applicable**

1. Not sure how the board does this.
2. I am not aware of how the Board is pursuing unlicensed practice, or poor surveyors.

### **Overall Effectiveness**

1. None. Based on the Boards published enforcements in its Bulletin, it could be better handled by the Court system.
2. very weak
3. Not sure what they actually do well.
4. none [strengths]
5. few strengths
6. NO! This is NOT done well!!!!!!
7. Antagonist

### **Process Timelines**

1. Based on the Board's publication, the time to "investigate" a complaint is long and inefficient.
2. Extremely slow.
3. Reduce backlog of cases.
4. More responsive, quicker turn around,

5. Takes too long!
6. Take forever to resolve cases.
7. The process time for enforcement is unacceptable due to lack of funding. I find that the person complained about often dies or retires before a license is revoked.
8. A bit slow.
9. review of complaints seem to be backlogged and take too much time
10. Some of the enforcement activities tend to drag on and not be resolved in a timely manner. I know the Board is aware of this issue.
11. Enforcement gets done but not always in a timely manner.
12. Takes a long time, not publicized well
13. Takes way too much time to evaluate and process complaints
14. Process is way too slow.
15. Apparent time to discipline.
16. Investigations take a long time
17. Having served as an active member of cases brought against professionals, I can say that the cases tend to take way too long for establishing a result.
18. A good deal of enforcement cases seem to take a very long time to investigate and conclude.

### **Quality of Subject Matter Experts**

1. follow through on cases of gross misconduct by those not licensed. Also not great at utilizing TAC to review cases. When complaints are filed there is sometimes poor follow through. very few cases of enforcement go to prosecutor level
2. Use of "independent well qualified experts" - WRONG! Selection process is opaque. Who tells the "expert" what issues to comment on? Based on personal and colleagues experience, this is currently the major weakness of the Board, and the area most likely to be challenged in the courts. this weakness definitely needs to be addressed - and soon!
3. "Enforcement should be by a panel of five licensed professionals in the field of the licensee. Some professionals believe that licensees should ""polce"" other professionals and submit a complaint from surveyor about a surveyor. The complaints should come from the public if they have been harmed. Remember, the public is as guilty as the poor practitioner! The public wants cheap and wants a stamp/signature. The good practitioners can never protect the public from themselves . . . so why are some surveyors filing complaints when it is part the public's fault and part the Board's fault for allowing some to continue to practice. You can't fix stupid, if Stupid was never mentored by an exemplary surveyor. Same for the four-year ABET graduates. Their

head is swelled by their degree and step out of college, hang a shingle with almost NO EXPERIENCE in boundary evidence and procedures, save, what they read from books in college. EXPERIENCE in boundary retacement is paramount to good results. Some show alternate opinions or NO OPINION at all on some boundaries . . . and charge the public up the ying yang for muddling the waters and not conclusive opinions. Sorry to ramble."

4. Again, no ability to have informed decision in citation, revocation cases due to no consensus of two opinions; only one expert making the decision as to a violation is faulty.
5. TACs could be better used to screen or streamline initial case review and address at a code interpretation or practice interpretation additional consistency in the area of enforcement.
6. Very inadequate and cursory review of complaints but still drawing conclusions w/o proper justifications
7. As described above, the regulatory agencies are promoting unqualified people to perform design and technical oversight tasks. Generally, it is because the regulatory agency are unqualified to supervise the tasks and they have no experience in the field. They may be licensed, but many of the staff came from college and got a job with an incompetent supervisor at the state. They don't have any idea how unqualified they are, or that they are requiring tasks to be performed by licensed professionals that are not legally qualified.

### **Require Continuing Education**

1. Require continuing education. Too many surveyors do not know about many of the Board Rules and do not take seriously the requirements.
2. consider continuing education requirement.

### **Understaffed**

1. needs more staffing
2. Hire more enforcement staff. Sometimes it seems that enforcement is arbitrary and slow.
3. Perhaps more enforcement staff are needed.

### **Unlicensed Activity**

1. Enforcement of unlicensed surveyors used by construction companies is a problem
2. need to enforce the practice of unlicensed land surveying by contractors. It's rampant.
3. The board seems unable / unwilling to enforce against unlicensed practice. There needs to be teeth when unlicensed folks practice professions to protect the consumer from

this sub-par performance. This could be an area where compromise in legislation would improve the tools the board has to enforce the regulations. The advancement of technology is eroding the technical barriers, but the professional judgement is still the essence of what protects the consumer in application of the technical information.

4. There needs to be more leverage for the board to go after unlicensed individuals. The fines need to be much larger for large companies to discourage poor business practice.
5. Problems with unlicensed practice n
6. Unlicensed engineering practice is too common.
7. There is a lot of unlicensed land survey activity that is not enforced. It is easy for people to perform unlicensed surveying without any consequences.
8. While enforcement against licensees can be considerable, there is virtually no enforcement against unlicensed practitioners, especially contractors.
9. Removing or prosecuting unlicensed individuals can be an issue.
10. Enforcing non-licensed practice.
11. not great at enforcing non-licensed actors.
12. The board does not enforce the PE and PLS Acts. We are consistently told that the board cannot provide enforcement on unlicensed practice. That begs the question why does a person get a license if they can perform the services without a license.
13. Lack of enforcement of non-licensed persons practicing geology
14. not policing contractors that perform surveying without a licensed LS.

## Internal Stakeholder Comments

### **Better Use of Technology**

1. "Lots of paperwork, didn't utilize technology too much because of requirements for having original copies. Utilizing technology to make things faster and not relying so much on paper. "

### **Communication**

1. Improve on this communication with outside parties in terms of managing the enforcement process.

### **Continue Connect Roll-out**

1. "Continue to look for ways to make case management more efficient, and reducing case timelines. Looking forward for Connect helping with file management. "
2. Working on developing enforcement module in connect system, will help with tracking of cases, internally.

## **Education of Enforcement**

1. "Publicizing the existence and pitfalls of unlicensed practice to members of related professions and regulatory agency reviewers. Encouraging submittal of complaints by licensees and regulatory reviewers.
2. Needs to be clear understanding that licensees need to abide by CA requirements if practicing in CA.
3. Closed session reviews of violations from licensed people, most common abuses include lack of ethical and compliance issues. Not following codes and rules. This area could be improved.
4. How to tailor revocation process to help people understand that licensees need to follow certain rules and that education pieces are important.

## **Enforcement Timelines**

1. Anything to reduce the timelines. Would like to see how to reduce times for the really complicated cases.
2. Always concerned it takes for the amount of time it takes for the entire process. Some cases will drag out. Board staff however is aware of this and do their best to minimize these timeframes.

## **Evaluate Best Practices**

1. It would be useful to evaluate against best practices, whether there is a need to address in the law or in regulations how the board can levy more aggressive requirements for restitution(for example).

## **Ineffective Enforcement**

1. Toothless dog when it comes to punishing unlicensed people. Would be helpful to have some legislation that would make unlicensed activity more of a deterrent.
2. Fines are too small to be a deterrent.
3. Fines are not nearly hefty enough to be a deterrent. Too many chances given to repeat offenders and bad apples. Teeth are not there.
4. Fines are too low to have any affect on discipline.



## **Metrics Reporting**

1. "Provide the board with more detailed information on the geographic - get Statewide metrics, but not detailed down to regions (i.e. Bay Area, SoCal, etc) Highlight more regional differences in reports. "
2. Establish metrics for types of violations. This could help improve the process. Discipline would be administered more fairly and objectively.

## **More Proactive Enforcement**

1. Enforcement is reactive. Board generally does not do much unless it is brought to the board's attention (usually by a complaint). Would like to see the board being more proactive on the issue of unlicensed activity. Ensuring that unlicensed activity is investigated and cited.

## **Overall Effectiveness**

1. Take all complaints seriously, even the meritless complaints. If they could weed out the meritless complaints more easily.

## **Respect from Licensees**

1. Board is not properly respected by some licensees.

## **Unlicensed Practice**

1. Would like to see enforcement step up on unlicensed individuals and trespassers. Board needs to step up and investigate these people and fine them.
2. Cannot enforce unlicensed people. Board has ability to fine/cite/discipline people who are licensed, but runs into issues with unlicensed individuals.
3. Keeping up with technological developments that enable unlicensed practice and threaten consumers.

## **Wider Pool of SMEs**

1. More recruitment for SMEs. Would like a bigger pool of experts to help review cases.
2. Pays low to professional SMEs, cannot hire the best people. Civil/Structural Engineering especially. So it's difficult to get SMEs, especially adequate ones.
3. Could do a better job with SMEs who help on the enforcement cases.

## Outreach Strengths

The below comments are stakeholder responses to the question “Describe the Board’s strengths, or what they do well, in the area of Outreach”.

### External Stakeholder Comments

#### **Accessible Information**

1. Once consumers find the website, it's fairly easy to get relevant information.
2. Frequent information provided to licensees
3. some readily available information online.
4. There are some useful flyers

#### **Communication**

1. Communication
2. Responsive to those who reach out to Board
3. The Board communicates well with licensees
4. The Board communicates through the online portal and meeting minutes.
5. Communicate well and frequently. Maintains the stakeholders informed and involved.

#### **Education of Licensure**

1. I have attended a workshop that the Board hosted and my workplace, and I found it extremely helpful as someone who was just starting to prepare to take exams and apply for licensure.
2. Always willing to educate consumers, licensees, and stakeholder. Probably the Board's biggest strength.
3. Generally people understand the need and law.
4. I knew of the importance of a PE license through colleagues.
5. lectures at conferences about licensure and exams are GREAT! really good info. same with lectures on processes

#### **Email Program**

1. E-mail and e-mail lists are effective.
2. effective email program
3. The regular email updates, and efforts like this poll are effective outreach efforts. Keep it up!

4. Email meeting minutes
5. I is helpful to have the e-mail list and website updates.
6. Once signed up for email newsletter, I feel well-informed.
7. Same answer as before - keep providing regular email updates!!!
8. emails updates are great
9. the board is excellent in sending updates thru emails. thanks much
10. emails

### **General**

1. Started and out reach program?
2. consumer oriented
3. Quarterly newsletters and monthly public meetings
4. Publicizes cases of professional negligence and falsevance.
5. outreach to building departments
6. Monthly meeting and pre-reads to the public with the agenda for that month is helpful.
7. Makes agendas of Board meetings available prior t o meeting dates, and holds meetings at various places in the state so more of the public can be involved.
8. Good Newsletter. Formal meeting announcement; and definitely this annual (?) survey of members' opinions and experience with the Board.

### **Miscellaneous**

1. They attempt to to pursue their mandate.

### **Not Applicable**

1. NO comment
2. Hell if I know

### **Overall Effectiveness**

1. The Surveyor Outreach done a few years back was done well.
2. "Outreach that is done is good.
3. Effective in notifying of boar meetings and agendas.
4. This is a good example of good outreach, hopefully meaningful input will be acted upon
5. Outreach efforts are OK, not spectacular.
6. Very good sharing of meeting info & other announcements.
7. There is good presence on line, with colleges, and with public agencies
8. Agree 100%

9. Seems effective with my limited interaction.
10. I think the Board makes some effort in this area to educate the public
11. Adequate
12. Definitely improving. BPELSG has been a good cooperative partner.
13. In addition to licensing, the outreach program is very good.

### **Promote Professions**

1. The board has been willing to work the National Society of Professional Engineers – California to help inform its members.
2. Board members do promote the profession among professionals and make presentations upon request, at professional meetings and conferences.
3. Life long learning for engineering
4. Effective in educating the public about the engineering profession
5. Simple and we'll presented explanations of what the engineering professions are all about. No
6. "Great when they do Outreach to CLSA Chapters and County Surveyors. One of the best ones that I attended was a few years ago in Santa Rosa at the State Offices! Great presentation and roundtable by [EO], [Land Surveyor Registrar] and the attendees. ('Course [EO] n' [Land Surveyor Registrar] were preaching to the choir.)"
7. Board members and staff are aggressive in their outreach program and are always available for presentations to professional organizations, schools, consumers, etc.
8. Willingness to meet with CLSA member associations.

### **Social Media**

1. Great twitter, excellent newsletter,

### **Staff**

1. [Geology Registrar] is the best Geology as a Career Speaker in the State!
2. Some outreach is done and the staff are good.
3. Board members and staff have been more out in the public of late.

### **University Outreach**

1. Making presentations to students and professors
2. Great outreach to universities!
3. Some outreach activities to school children and college students.
4. Staff provides extensive outreach to California engineering schools.

5. board reaches out to universities on the importance of licensure
6. The California geologist board staff do a great job of public outreach and connecting with graduating geology students.
7. At times, the Board has sent someone to students to give them a background in registration.
8. Good outreach to students
9. College visits are a good starting point for the awareness.
10. Visiting professional engineering colleges and schools, visiting guest trips during accreditation review etc
11. In college it was easily identified that becoming a professional was the route to go. It gave you credibility & identified your skill set.

### **Website**

1. Good website
2. Good web page,
3. Appreciate the communications updating the website and online tools as well

### Internal Stakeholder Comments

#### **Accessible Outreach**

1. Wonderfully accessible to the public. Board meetings are easy for public to attend. Board goes out of their way to reach out to the public.

#### **General**

1. Board has outreach tools such as social media, website, and newsletter. Board is exploring different methods of outreach.
2. Sending out regular alerts or emails to the regulated community.
3. Board is reaching out to every engineer/non-engineer that is interested in the board's activities.
4. Board has increased it's value for outreach, especially during COVID. Prior to COVID there has been much more importance to outreach.
5. "Several board members have participated in outreach activities. More collaboration with the board members."

#### **Newsletter**

1. Quarterly newsletter that goes out. Board does a good job of always being on time quarterly. Let's people know what's going on at the board. Provides good information.

### **Outreach to Schools**

1. In person outreach events to universities and colleges
2. "Maintaining relationships with colleges and university professors in fields licensed by the board. Making presentations to students in those fields on licensure and how to achieve it. "
3. Board does a good job of making presentations to students at conferences and trade association meetings.
4. Pre-pandemic: Good robust outreach program. College outreach to encourage licensure. Would go to the schools to make presentations. Outreach to professional associations to make presentations about licensing, board activities, complaint process, etc.
5. Post-Pandemic: Still send out information to colleges, and send out zoom presentations.
6. The outreach to school programs is a huge strength.

### **Overall Effectiveness**

1. Board does a reasonably good job with the resources that it does devote to outreach.
2. "Board is moving in correct direction. Board is doing it's best with fulfilling it's mission and vision. "

### **Proactive Outreach**

1. Land Surveying - EO and Land Surveyor who works at BPELSG have taken a proactive approach to outreach for land surveying.
2. Very active with schools and different licensing societies. Active approach.

### **Social Media**

1. Social media is also there.
2. Adapting to social media presence. Taken advantage of COVID to have more far-reaching efforts - utilizing web opportunities.
3. Try to maintain presence on social media, such as facebook and twitter.

### **Staff**

1. Registrars and staff have done better job reaching out on the licensing side.

2. 3 to 4 people on board staff who do a really good job on board outreach. Willingness to reach out to stakeholders. Huge strength.
3. "Qualified people go to various universities to promote licensing. Person who does the outreach events provides a lot of knowledge to the places she goes. Qualified people going to promote licensing. "
4. "Senior registrars are involved with outreach efforts with schools and trade associations. Regularly give informational presentations to the groups who are pursuing licensure or are already licensed. Talk about current information in the industry. Interacts with trade groups and academic institutions. "
5. Registrars in office are very good about setting up workshops - remote or in person - and talking to schools/organizations about licensing and answering questions for those who want to get into the profession.
6. Embracing and willing to do outreach. Involving multiple different people in this role. Licensed staff members reach out to professional communications. Coordinating outreach opportunities. New manager has come up with lots of great ideas on how to improve outreach.
7. Board staff is eager to accommodate the suggestion for outreach events.

### **Website**

1. Great website. Great interface with current members. Bulletin goes out regularly.

## Outreach Weaknesses

The below comments are stakeholder responses to the question "Describe the Board's weaknesses, or what they can improve on, in the area of Outreach".

### External Stakeholder Comments

#### **Accessible Outreach**

1. I don't see enough easy-to-read outreach.
2. None really. California is a big state and it's hard to hold meetings such that stakeholders throughout the state can be involved.

#### **Better Collaboration**

1. The Board could work closer with CLSA, the major Land Surveyor professional group in California

## **Better Email Program**

1. Need to provide a Quarterly newsletter to all professionals. It needs to outline enforcement cases and how they were decided. Share with us on how to work within the scope of the law. Email. There use to be a written one?
2. The BPELSG email list is done with what looks to be an ancient text-only listserv. The content of the emails seems very administrative. Not sure if that's on purpose, but it's hard to get excited about it. Perhaps some upcoming events, project highlights, or something about people would be nice.
3. Put the email notices into a journal format in conjunction with several California engineering news outlets.
4. No simple newsletter email of update to license and application info
5. The newsletter is a joke

## **Communication**

1. I hear nothing from the Board.
2. Need more communication to professional engineers and to the public.
3. They need to communicate carefully and effectively with those critical of their work. when folks offer solutions they need to be received with genuine interest even if they won't ultimately be used. Responses should be considered carefully before they are issued.
4. Again, we see no communication on this topic.
5. Communication has been hit and miss in this area but is improving.
6. Poor, the board need to improve outreach and communication on all levels.

## **Educate on Professions**

1. "Better professional engineer outreach requiring regulations and resources for professional engineers. Better public outreach regarding the roles of and public's need for professionally licensed engineers."
2. Engage with students and other unlicensed persons to educate them on what Engineering, Land Surveying, and Geology is all about.
3. need to be on the forefront at the highschool level promoting the professions.
4. I do not see any promoting or educating. It would help if they required continued education and other courses to reach out and educate everyone.
5. A lot of people do not know about the laws that effect them. More advertising would be good. I can't think of the last time I saw anything about using a licensed engineer except when dealing with the board.



6. Board could provide more information for public agencies to share with their citizenry. Sometimes the message is misinterpreted. For example, I hear from clients that are told by building department employees "All You need is an engineers stamp and signature." This breeds questionable work among weak engineers that may be tempted to make a quick buck. There is a reason for the engineered design and approval.
7. The board needs to do more to promote what is surveying and other professional services to help people understand what the professions are that require licensure
8. The board needs to be able to better differentiate with the legislature and the public the difference between vocational licensing and the professional licensing of engineers.
9. There would be benefit in additional outreach, particularly for newly licensed professionals, regarding the requirements under the Business and Professions Code.
10. A guidance document for local agencies regarding geologists similar to the one prepared for engineers would be useful.
11. Provide licensees with information on regulations found in need of improvement by consumers
12. The Board's outreach does not extend to understanding the challenges of existing licenses
13. Community College education for advanced technology, science based for engineering.

### **Miscellaneous**

1. (See previous comment in 'Weaknesses' for Enforcement.)
2. There are not enough licensed land surveyors
3. you are the Board. no outreach needed. we come tp you, not you to us.
4. DCA meddling
5. I feel they could work better with the small firm, private surveyor, instead of attempting to go after them.
6. "The current trend is away from any requirement for professional licensing. Many times I applied for an engineering position. ""We cannot interview you because we require a BSEE degree and yours is in Physics."" ""But I am a California registered PE with many years of automatic test program set development."" ""Sorry, that is not in the requisition."" What's a PE good for? I know how to wire weapon systems, not buildings."
7. Board should shift to the Dept of Commerce, like Alaska and not cater to consumers as it does not. We have 8 times the number of lawyers to professional engineers.
8. Find Retired civil engineers, water engineers, who will SPEAK OUT about failures, like not constructing Sites Reservoir.

### **More Effective Outreach**

1. Board staff claims to do outreach but its not clear exactly what that is. It appears it consists of talking to college clubs about registration and having Board staff go to national meetings.
2. I can't say that I notice any of this so it is an area that should be improved on and I would absolutely support a more robust outreach program.
3. Have not seen any outreach.
4. I see very little outreach from the Board, so suggest conducting more. If possible, use social media, unions, etc.
5. More outreach!
6. I worked for the state in a regulatory program for 21 years both at the regional board and the state board. In all that time, the Board of Geology or the combined geo/eng Board never came to the office and provided a presentation informing the staff the requirements of professional licensing and the requirements for various technical reports. All I ever saw was a dramatic increase in fees.
7. I see no outreach in the public or at professional meetings.
8. Does not pursue effectively
9. It isn't obvious that this is taking place
10. This is the first time I've ever been contacted by the Board. Not sure how much actual outreach there is
11. I have not seen a lot of outreach.
12. I am aware of very little outreach the Board is doing.
13. There seems to be very little outreach from what i see.
14. In my experience there is little to no outreach from the board.
15. I don't see much outreach to new, unlicensed engineers or in colleges/universities.
16. As a consumer, I can't recall ever seeing board activities in this area.
17. Lack outreach communications
18. There is no outreach by the board, bring back the newsletter!!!
19. I am not aware of the outreach programs.
20. Could use more effective outreach.
21. Not enough direct outreach
22. Utilize webinars more,
23. The results of the Outreach provided good feedback, but nothing progressed from there that I am aware of.
24. keep going to many CA colleges as possible
25. Outreach to local government could use work. Local planning, building, and public works officials do not know the regulations for many of their applicants. An example in the case of site plans, when is a boundary survey necessary, topography, set back information, who can prepare, etc.

26. "Initiates local meetings with professional community throughout California less frequently than could be done. Could use virtual platform for these meetings if not enough time for in-person meetings"
27. Variable outreach to professionals
28. spends too much time and money building an empire. Outreach is not mandated nor desired.
29. Exercise caution while performing Outreach functions to ensure that politics does not cloud professional scientific judgments.
30. I hadn't heard of the board until earlier this month, even though I've been working in the space for 7 years. The board is not "out there" at industry events or adjacent activities in local communities that have needs.
31. Talk to a LOT of engineers

### **More Webinars**

1. "I do not see much communication and videos communicating the importance of getting a license.

### **Outreach to Younger Audience**

1. I've never seen any outreach so I have no idea what the Board might be doing. (Maybe it's great but as an "older" engineer, I'm just not your audience. Hoping there's outreach aimed to university students and "new" engineers.)
2. No enough outreach to youth.

### **Overall Effectiveness**

1. Needs improvement.
2. It's tough for any public agency to outreach.
3. None [strengths]
4. Poor, the board need to improve outreach and communication on all levels.
5. Not enough money and/or Board members to merit any positive changes.

### **Promote Importance of Licensure**

1. The Board ignores the importance of professional registrations by failing to enforce violations by unlicensed individuals and companies. It is well known in the construction industry that no enforcement will happen for any violations.
2. inform the public about using licensed vs non licensed and the pitfalls that can occur
3. does not promote enough of the reason why licenses are important to the legislators.

4. I would like to see more outreach on license usefulness for the other practice act professions (Electrical, Mechanical)
5. Board doesn't reach out to municipalities or others that require licensure. Should make the application or video explaining importance and procedure available to all.
6. "I disagree that you 'promote' the importance of licensure. How do you do that? Awareness campaigns? promotions in accredited engineering schools? working to change the industry exemption to protect our titles? reinforce the value of highering licensed individuals by the public? Promote licensure by punishing those unlicensed practitioners who are illegally providing services? or do you mean you promote it by lowering the bar with CBT testing, decoupling and letting NCEES dumb down our engineering stock of individuals who can pass the M/C exams that are easy to grade thus saving money at the expense of the public's safety? this is probably what you mean.
7. They can promote our industry. Help protect us from unlicensed.
8. does not promote enough of the reason why licenses are important to the legislators.
9. The Board should reach the public in more effective ways to educate them regarding the importance of the licensure. It should be emphasized that the engineering license is as important as licenses in the medical field.
10. I think it is important to have outreach events at universities with engineering programs to show future engineers about licensure. In school we typically end up hearing about EIT and PE from our peers and rarely from our professors. Especially for PE I think it's important because not all professors have attained licensure. The board needs people out there spreading the word to those students who may not even know about them and role licensure plays in their future careers.
11. Would like a more robust presence in the area of educational institutions and the generally community about what the board does and how they affect the professional careers of it's members as well as what they do for the general public
12. Unfortunately, employers want less external influence on their practices. The Board needs to be resolute in showing how and where licensure protects the public - not just in specific activities but also in giving licensees the backing to stand up for professional practices.
13. The promotion often focuses on justification for the Boards existence without really improving the standard of practice and competency of the licensed.

## Public Awareness

1. I don't think hardly anyone outside the profession of engineering knows about the licensing of the engineering profession. Maybe the Board should consider consulting with a professional advertising firm.
2. Apart from passive approach (information on Board website), there is no outreach to the general public. City Hall counters are full of helpful pamphlets informing consumers what activities require licensed contractors but I've never seen the equivalent for engineers
3. The average consumer has no idea about the practice and regulation of the profession.
4. beyond word of mouth, I don't think the general public is exposed to what a PE is.
5. I'm not sure this is a weakness but one thing that I think is important for the public to understand is that most buildings that engineers design are not earthquake proof. Most buildings are essentially just designed for life safety. I think this misunderstanding is unfortunate as the public doesn't understand the damage that will most likely occur in a significant seismic event and engineers will be blamed for not providing good building designs.
6. describe, in detail, what a consumers expectations should be and make sure that they are realistic
7. I see little or no communication about what the board is actually doing to protect the public or adapt to our changing society and technology to continue to protect the public in the future.
8. Lack of public outreach to consumers regarding the need to utilize licensed practitioners
9. More public education. More targeted education to realtors.
10. The general public has little idea of what this Board does and the importance on their safety.
11. The Board does not seem to do much public outreach. It would be beneficial if there was a more broad public campaign and more communication directly with agencies on the front line of the regulated practices.
12. outreach to consumers
13. But it could do more public relations and explaining to the consuming public the need for using a licensed practitioner and the importance of these services, particularly with public agencies and the private land development community.
14. In every news article, mention should be made of engineering when it applies. The press should be notified
15. Use a PR team on public tv to promote and explain The Boards practice and regulation of the professions and educate about the various professions.
16. I think more advertisement to public similar to what contractors board does

17. I am not sure that the average consumer is even aware of the board's existence.
18. In some cases, consumers may not even be aware of the existence and need for professional engineers. Initial outreach may be an issue.
19. description: "inadequate outreach" to citizens who NEED you always involved.
20. We need a state-wide effort to get the public to understand the roles of Land Surveyors within the law. Including construction staking, Unmanned Aerial Systems, and other protected practices when it comes to Geodesy and 8726(f)
21. I have not seen any outreach to the general public or to registered engineers. On occasion I receive changes to rules and upcoming public meetings. But in general, I am not sure the public is aware of the Board and how important it is for PEs in CA.
22. The public knows next to nothing about regulation. Most engineers have a hazy idea of registration and since, unless they are civils, are happy to stay that way.
23. The public thinks all engineers are created equal. People are surprised but then awed to learn that I hold a license. Also, someone who designs the artwork for electronic games is an artist not an engineer.
24. The public doesn't know anything about licensing requirements (who is licensed, what that means, etc.)
25. I have never seen in any publication information for consumers concerning the regulation of the professions
26. Geologist here - I'm aware of Board outreach to professional groups (presentations at meetings), but I'm not aware of any outreach beyond that (I don't use social media, so I've missed anything that might be happening there). What efforts does the Board make to promote/make aware the general public? Are their press releases announcing each new class of newly licensed PGs (e.g. numbers passed, total numbers still active in the state)? Is there media outreach around resolution of disciplinary issues (e.g. numbers adjudicated each year, types of cases settled, why these disciplinary actions benefit the public)? I'm a PG, and beyond my wife, I doubt any of my non-professional friends and contacts are aware there is licensure for geologists, let alone how licensure benefits the people of CA.

### **Publication of Enforcement Actions**

1. Need to summarize & send to registered professionals outcomes of enforcement activities
2. Board should monthly inform stakeholders of number and types of complaints as a reminder and cautioning mechanism to encourage compliance.

### **Social Media Presence**

1. No LinkedIn and/or minimal social media presence unlike other entities under DCA (i.e. California Architects Board, Medical Board of California, etc.)
2. Newsletter? socialmedia?

### **Staff Expertise**

1. The staff appears to be people with little experience in the field of engineering and geology before obtaining employment with the State. The impression, probably true, is that these people were actually very good at engineering or geology and managed to find their level of incompetence as Board staffers.

### **Unaware of Outreach**

1. I'm unfamiliar that outreach was even a goal of the Board.
2. I am not aware of what the board does since this is not communicated to us.
3. I do not commonly see such communication, this is an opportunity for improvement.
4. I have not seen any outreach until this email for the survey.

### **Website**

1. difficult to navigate to BPELSG from a.gov main page

### **Internal Stakeholder Comments**

#### **Better Education to Licensees**

1. Could do better on keeping people up to date on a more daily or weekly basis. If there are rising calls for a certain issues (ex. exam site), the board will contact people individually involved in the situation, but could contact the greater population and keeping them in the loop.
2. A little more focused outreach - most outreach right now is pretty generalized. Want to get down into details of licensure for specific license types. Could improve this communication.
3. Licensees used to get quarterly magazine that had disciplinary actions listed - however believe this might be digital only. Would be good if licensees paid more attention to the disciplinary actions. Perhaps part of the renewal process.
4. Part of the outreach should be providing information on when licensees are disciplined.

#### **Emphasize Importance of Licensure**

1. "Better outreach of importance of licensure will help with unlicensed activity. Ensure that licensees understand the rules. Ensure the public that there's a board out there protecting their interests and how to file complaints. "

### **Increased Outreach**

1. Increase outreach activities with stakeholders and within the profession could be improved.
2. Beneficial to have more outreach to government agencies that are part of the review process of the board's licensees works. Few years ago did have an outreach program for this and a publication, but it needs to be updated.

### **Increased Social Media Presence**

1. Could probably get the board out there more on social media.
2. Feels that social media does not have that big of an impact.
3. Outreach events are not publicized enough - more social media and public awareness.
4. Be more consistent with social media program - Facebook and Twitter accounts. Trying to consistently push information through those social media channels to engage with as many consumers as possible.

### **In-Person Events**

1. Due to COVID, have not been able to conduct these in-person events.
2. Would like to see more in-person meetings in the future. Face to face communication.

### **More Board Member Involvement**

1. Board staff do not tap into the board members as much as they could. Board staff don't actively reach out to board members for help with outreach. Several of the board members could be helpful with these activities.

### **More Effective Use of Resources**

1. Board could do a better job at outreach. Could devote more resources towards outreach. Possibly more staff solely devoted to outreach. Some Professional Engineers seem aware of outreach, but not enough.
2. Not sure the board is utilizing the tools effectively. Not sure if getting the message out is done in an effective manner. Don't remember getting any messaging on the board unless getting being proactive about it. Tools are not being used efficiently by licensees



or consumers. The board needs to do more. Opportunities to make outreach more effective.

### **More Rural Outreach**

1. Rural areas are more difficult to reach, few board members are not as active in Sacramento.

### **Online Videos**

1. Lack of online videos. Would like to film an outreach event and put it on the website. Give better education on the importance of licensing.
2. More effectively use the website to put information. Put interactive content on the website - such as a land surveyor speaking on the profession. Make it more personal.

### **Updated Webinars**

1. Love to see more updated webinars and training modules, especially with the Connect System.

## **Customer Service Strengths**

The below comments are stakeholder responses to the question “Describe the Board’s strengths, or what they do well, in the area of Customer Service”.

### **External Stakeholder Comments**

#### **Accessible Information**

1. easy access to information

#### **Communication**

1. Whenever I have called or emailed about a question, I generally receive a helpful answer or response in a timely manner.
2. Well implemented and straightforward communication of licensing fees. Easy to pay by credit card billing.
3. Communications
4. Communication with all registrants through email
5. Provides license renewal reminders as well as periodic newsletter to licensees.
6. Newsletters and notifications of meetings are useful for this area.

## **Easy to Contact**

1. When I have contacted the staff about a question on renewal, they were easy to contact.
2. They are accessible via email and phone.
3. Available
4. Staff accessible
5. Umm... well, I was able to reach an actual human (via email) when the website would not let me set up an online profile.

## **Friendly Staff**

1. Staff are friendly and competent.
2. Friends dealing with the Board seem generally pleased with the service.
3. everyone's always been nice when I call or email. Its also nice to speak to a person and not a robot

## **General**

1. Always been helpful to me.
2. good communication
3. Stand up for licensed design professionals.
4. Investigates complaints
5. I believe they do their best with the resources they have.
6. Having experts on staff to answer questions
7. Someone is usually available to answer questions.
8. From the outside the Board staff appears to be cohesive and function well together.
9. Being able to contact associates for questions and help.
10. Communicating expectations
11. Great job every time I have contacted the board for anything.
12. the respond well
13. Have received answers to my questions
14. Lots of emails
15. Attentive and responsive
16. Being able to renew licenses is a benefit.
17. Mostly digital customer service.
18. I think that attending meetings of engineering organizations is very good.

## **Miscellaneous**

1. Same answer as before - very important to me as I reside in Florida.
2. <sup>8</sup>

### **Not Applicable**

1. Other than annual renewal I have no contact with the Board, and therefore have no basis on which to judge the strengths or weaknesses.

### **Overall Effectiveness**

1. Ability to make some changes in service even when saddled with state bureaucracy.
2. Licensing procedures are efficient from the licensees perspective.
3. Outstanding quarterly reports; copies of minutes and activity of the Board
4. Seeking public input and a good evaluation of the issues.

### **Phone Calls**

1. Surprisingly good telephone answering service
2. Telephone support is general helpful in answering questions.

### **Professional Staff**

1. My few dealings with Board staff have always been professional and helpful.

### **Renewal Process**

1. easy to renew license. easy to look up licenses.
2. Web renewals are a positive
3. Renewal is efficient process
4. Timely renewal notices and processing
5. I am able to take care of my renewals efficiently on line since I reside in the Eastern part of the United States.
6. Added new web application for renewals
7. The license renewal process is improved.

### **Responsive**

1. folks always try to find the answer even if they dont know it.
2. Anytime I've called with a question or request it is always handled quickly which is awesome and greatly appreciated .
3. Quick response time.

4. I contacted the Board once, and received prompt, efficient attention. (Likewise here in Nevada.)
5. Emails and phone calls are promptly responded to
6. I've only needed to reach you once to inform you of the death of a fellow PE. You handled the situation promptly and graciously. Thank you.
7. Seeming prompt responses to licensee and public queries.
8. Responsive and timely for the most part.
9. response to inquires seem to be presented in a timely manner
10. Response time is very quick when interacting with the board
11. Prompt response
12. Timely response to application, easy to update address, quick response to email questions
13. Board is very responsive and fair with applications and license renewals
14. Reviews inquiries and responds well
15. I am generally successful in getting a response from my BPELSG contacts within hours or a day.
16. Humans answer the phone and actually call me back
17. Very responsive to questions from the public.
18. Over the years, the Board has been very responsive to all of the different requests that I have made of them.
19. I recently had a question about my renewal, and I was able to call and speak with a helpful staff member. Being able to reach a live person is always nice, but it was particularly welcome during COVID when it was difficult to reach many government offices. Nice job!
20. Your enforcement people have been helpful when contacted.
21. Very responsive to e-mail inquiries.
22. Responsive to licensee inquiries.

## **Staff**

1. staff is very cooperative and supportive
2. I felt like staff members were always prepared with a record of my application status.
3. I have not had to get someone on the phone for years, except for an enforcement person. He made himself available after a while.
4. When I had a re-licensing issue staff was very attentive and we resolved the problem quickly.
5. Board staff are generally available and willing to talk to the public.
6. There are some talented people and staff on the board and in the office.

7. Staff is always responsive to the public.
8. Current staff response to online inquiries is great
9. During COVID, I needed to call to verify electronic stamp requirements, staff was helpful and effective.
10. When I have contacted the board, the customer service has been outstanding. Every time they have been very helpful and knowledgeable and resolved issues.

### **Website**

1. Have a website
2. Informative website. License lookup functions well.
3. e-mail notice, on-line resources
4. The website gives a good deal of information on licensees and enforcement procedures.
5. "Good website with information customers need availed at their finger tips

### Internal Stakeholder Comments

#### **Accessibility**

1. Board did a phenomenal job with shifting to a virtual world to maintain the meetings and using technology to allow for public input. Adaptability of the board in times of crisis to ensure that they deliver on their mission.
2. Board is very accessible to the public in all ways. Plenty of notice in advance, agendas are available, different ways of receiving the agenda. As a licensee, it's accessible, the board responds really well and have great staff.

#### **Committed Staff**

1. Board staff are committed to high-levels of service.
2. Board staff are very engaged and dedicated in providing the highest form on customer service to licensees, applicants, and consumers.
3. Staff is very helpful with helping licensees and applicants.
4. Lots of knowledgeable staff, and if they don't know the answer they will research in information and follow up
5. "Very friendly people at the board - staff is very pleasant, friendly, and supportive. Staff are very clear about their roles and responsibilities. Have not heard any complaints from staff. "

## **Communication**

1. Communication and direction to the licensees and the public from board staff and board members.

## **Customer Service Oriented**

1. Staff want to be the best at customer service and are really invested in customer service.
2. Don't hear any complaints in this area. Sense is that staff are customer service oriented and view customer service as important.

## **Keeping Licensees Informed**

1. "Publicizing the board's work to licensees through email and social media. Where needed, providing individual attention to applicants, licensees, complainants, and respondents. "

## **Knowledgeable Staff**

1. Board staff are informative and provide quick and clear feedback to licensees.

## **Overall Effectiveness**

1. Don't seem to get a lot of complaints about board staff in this area, so seems to be going well.
2. Very accessible, very responsive, very helpful to public, licensees, applicants, etc.

## **Responsiveness**

1. "Staff have been pretty responsive towards their 'customers'. (Applicants, Licensees, and the public at large) Connect system is helpful in improving this responsiveness. "
2. Staff make sure that they are answering questions to completion for the person contacting the board.
3. Exceptionally good at answering phone calls and emails. Board staff is very good at taking phone calls and getting back to folks. One of the better customer-oriented boards at DCA.
4. Whenever calling the board, there is a prompt return of phone calls, emails, and messages.
5. Fast response,

6. Responsiveness. Each unit has their own phone lines/email addresses. This puts the questions where they need to be and the person contacting will be able to get answers sooner and from the right place.
7. Ensuring that staff is available for phone calls and responding to emails and other correspondence. Being there for the applicants, public, and licensees to answer questions.

### **Website**

1. "Great website. Maintaining website.
2. website provides latest data
3. BPELSG website does point people in the right direction of who to contact.
4. Board does a good job in trying to provide information on the website to the public.

### **Workplace Culture**

1. Maintaining cooperative relationship among staff members, board members, and between board and staff.
2. Work atmosphere is very positive - kudos to Executive officer for creating this environment.
3. "EO models the energy level. EO, staff, and board members participate in dinner/lunch outings after board meetings. Right kind of culture in the organization, which reflects on customer service. "

## Customer Service Weaknesses

The below comments are stakeholder responses to the question "Describe the Board's weaknesses, or what they can improve on, in the area of Customer Service".

### External Stakeholder Comments

#### **Application Timeline**

1. Since one might not receive a notification that their application is in review for months after sending it, it can feel like one is submitting their application into a void. It would be helpful to have some sort of resource or notification regarding up-to-date estimates of application process time.

#### **Communication**

1. Very hard to reach.

2. Very hard to speak to someone and get response in a timely manner.
3. inconsistent message and responses from workers regarding stamp requirement on proof of work experience, penalizing applicant because licensed doesn't have stamp or time for unnecessary paperwork
4. Need more resources and more communication on where things are at or where they are going.
5. Don't always see the service, except in emails.
6. Board members inaccessible
7. Responsiveness could be better.
8. Many of the issues with which the Board is responsible are complex and technical. This presents a challenge when communicating to non-technical persons.
9. Not sure who the customer is in this context but responsiveness is often inconsistent.
10. I am not aware of what the board does since this is not communicated to us.
11. Board is difficult to get in touch with.
12. poor response to questions, do not listen well to practicing community
13. \This lack of customer service gives the impression that they do not want/care about the people they are tasked with overseeing. Therefor I no longer make any attempts to reach out to them.
14. emails contain lots of fluff

### **Friendliness of Staff**

1. It seems that there is a disconnect between the board and its licensee's and a reluctance to make the interactions positive experiences. I have only ever heard of issues.
2. "Can't even type this much. I have never ever felt welcome contacting my own licensing board as a student applying for the EIT, a PE candidate or even during my SE application. They just are not nice, and like any government employee let you know that you are not welcome to call and are dumb for even having questions. Web resources have helped limit the need to contact the people in Sacramento, but this never excuses the behavior to just pass it to a webpage. but its good for budgets, right? Public service training should be a must for all your outward facing employees. You are here to serve the public and the licensees, act like you're happy to help a little bit.
3. sometimes heavy handed and bureaucratic and adversarial to licensees when not needed..
4. historically, the answering representatives for the public phone calls provided unfriendly responses, the responses were too short without guidance, the repetitive rushing to hang up the phone the for inquirer due to luncheon nearing timing. recommending that all calls to the board to be recorded, train clerical staff on professionalism, provide staff



the minimum knowledge of the engineering process toward licensures, and provide staff with flex scheduling so phone calls do not have to end in hang up due to lunch time

5. Presence of customer friendliness service will be greatly appreciated thru consistent customer recorded survey evaluation of the communications

### **Lack of Business Modernization**

1. BPELSG is lagging behind in adapting current technological in all procedural and all examination evaluation aspects. Many current methods are still being used since the 70s era. Examination administration evaluation has not changed exam admittance qualifications procedures are outdated and contain consistent mistakes within. Other states had already adopted much more efficient tech systems to serve the engineers and the CA-public efficiently. NCEES systems are a good guide
2. the two-year retention policy for application materials is silly. Those materials are really hard to gather and if someone gets delayed to take the test a couple years everything they pulled together is gone--some of it might not be able to be gotten again. Cloud services are available so the board doesnt have to retain paper copies if space is the issue

### **Licensee Privacy**

1. In this day and age of identity theft, why does the Board still require publishing names and addresses? I know there is a statute that requires it, but that is outdated. If I want to find out who rented a post office box, I simply contact the local postmaster and the information is provided (with adequate justification). The Board should be working to revise the statute so that personally identifiable information is only available upon request to the Board.

### **Miscellaneous**

1. On occasion I may contact the board - in the past CS has been fine. Not sure during the pandemic if CS was an issue. However, I do not recall receiving updates from the Board like in the past, such as changes and monthly updates.
2. See the enforcement comments.
3. I
4. My \$10 request for a wallet card perhaps got lost in the mail.
5. End the stupid covid excuses
6. DCA meddling.
7. see comment on number 5
8. Simply the refile application procedure

9. The online conversion by the board seems to highlight chromebooks. Chromebooks are a cheap option for elementary school, not professionals
10. The board lacks effectiveness as they have no real recourse to stop contractors from construction staking or using GPS survey equipment for the services they are providing like Machine Control Grading which relies on performing Surveying to get their equipment to operate properly.

### **More In-Person Interaction**

1. Needs more in person/live human options.

### **More Transparency**

1. From the public's perspective, more information should be provided in publications to make the public aware of the Board's services.
2. Like previously noted . . . the "license lookup" looks all hunky dory. Unless an attorney makes a call to inquire about a licensee.
3. Provide more on-line information about professionals under investigation and why. however, at the same time there must be support of the professional to avoid ruining their practice because of unfair complaints.
4. Obtaining records of enforcement actions (or lack thereof) is somewhat mysterious. Can lead to potential litigation often to the detriment of the licensee.

### **No Board Support**

1. Not standing up for licensed design professionals?
2. You need Advocates to take out ADs, volunteer to help Private enforcers, and EDUCATION of how vital Engineers are to Life, health, safety, water supply, etc.
3. Customer service is not just punishing licensees. The Board needs to show the public how licensure not only protects against specific professional failures but also promotes professionalism in the workplace.

### **Online Renewals**

1. Hope the Board can come up with simplified online process for renewing licenses
2. I had trouble setting up an online account when I wanted to renew my license online.
3. Payment on line without any questionnaires should be allowed.
4. Had to mail in renewal check and took time to be sure it was processed. Would like licensee renewal online payment option.

## **Overall Effectiveness**

1. None [Strengths] (2)
2. does not do this.
3. Disastrous - need improvement
4. The nature of the work can make it difficult. Consumers often have an agenda when they approach board staff and staff has to be cautious.
5. Stop trying to please everyone that is politically connected. This is not about how you look, but what you do!
6. While they work hard, they could benefit from additional instruction on the practice of engineering so they could better evaluate the difference between complaints based on actual code violations from customer satisfaction.
7. Didn't know you had any with respect to EDUCATING citizens and children how important civil engineers are.

## **Poor Customer Service**

1. sometimes when the board staff is asked about why things are done a certain way or why a certain outcome came about they seem defensive. They would be better served by just laying out facts and providing reasoning without being defensive. being defensive often time this seeds distrust in those asking questions.
2. Customer service? I've yet to receive a response that I would consider "customer service".
3. Board customer service does not exist, there is no response to emails, no assistance in resolving problems, and there is no listening nor understanding - the board is an unbreakable wall when it comes to customer service. Customer service is unpleasant and unacceptable, nowadays. Customer service was not so bad few years back but now it is totally bad. I personally experienced a lack of communication and personal skills in board customer interaction.

## **Quality of Service**

1. Only reduction in the quality of service has been observed. How has the Board's effectiveness and quality of service improved?

## **Responsiveness**

1. Board does not respond to e-mails & phone calls promptly, if at all.
2. Very poor turn around times,

3. Every attempt I have made to contact the board with questions or concerns has been ignored. I have only had one returned call/email in 9 years
4. I've noticed I do not get a response if my inquiry appears to be valid, and they do not agree.
5. Not responsive to exam applicants. I have heard myriad complaints from all over the State from applicants who do not ever hear from the Board regarding their questions with regard to exams.
6. More responsive
7. Clerical and public responding team are surly in great need of Professional training on the engineering process, customer services and for the correct prompt responses on engineering issues. Historically speaking Prompt responses are of no existence usually too late or none especially thru emails communications
8. Complaints to the board: The current Complaints process are not efficient The complaints process is open for submittal only, yet hardly tracked and/ or followed thru. So many complaints were not attained for nor investigated: due board employees retirement or negligence, the complaints are usually forgotten and never taken care of

### **Slow to Respond**

1. Can take a while to get a response.
2. Relatively long period of time to respond to the enquiries.
3. Responses to email inquiry are a little slow, even before the pandemic.

### **Social Media**

1. misleading social media

### **Staff Availability**

1. I know some folks had a difficult time applying for the exam in recent years and required repeated follow ups upon submitting applications. It was difficult to reach staff for help and documents were lost by staff on multiple occasions.

### **Understaffed**

1. need more staffing
2. It appears the board is understaffed with regard to customer service.
3. Staff shortages cannot be helped at this time
4. Sometimes getting a swift response is untimely. To me, this means there is a lot of workload by Board staff, or there is not enough staff to handle the workload.

### **Unequal Customer Service**

1. Customer services only extends to the general public, not to licensed professionals.

### **Unlicensed Practice**

1. It seems like the board is always looking for a reason not to provide enforcement on unlicensed practice.
2. better enforcement and legal action against none licensee.
3. Need to solicit feedback re unlicensed practice

### **Website**

1. Website is not user friendly. Not totally online only. Payment online is additional fees.

### Internal Stakeholder Comments

#### **Communication Methods**

1. Anticipating shift from phone calls to more text-based communication.
2. Might develop an app for the licensees to complete renewals on the app and see board bulletins online.

#### **Consistent Customer Service**

1. Not consistently achieving the best at customer service that we can possibly do. Can always improve from everyone. Something that can be continued to work on.
2. Look for best practices in the industry of customer service for any areas that the board can improve. Maintain standards.

#### **Increase in Board Meetings**

1. Increase the number of board meetings, which in turn would improve customer service.

#### **Increase Public Awareness**

1. Not sure if general population knows or understands how to protect themselves when they do hire a geologist/engineer/land surveyor. Could do better job in informing the public on license status.

#### **Lack of Feedback**

1. Lack of feed back to know weak areas to improve.
2. Canvas the licensees to make sure that the board is satisfying the needs of the licensees.

### **More Proactive Communication Methods**

1. Having a way to better communicate with licensees and applicants, rather than just hoping they sign up for email list, follow on social media, etc.

### **Remove Plastic License Card**

1. Get rid of plastic license card.

### **Short-Staffed**

1. one limitation is in forms of communication - it's difficult for staff phones to handle all the inquiries. Hoping that connect system will improve this.
2. Short-staff currently. Response times could be reduce. COVID has affected the response times. Making sure communication is effective and getting back to people in a timely manner.

## Appendix D – Objectives

This appendix contains the qualitative data relating to suggested objectives provided by board members and board management collected during the interviews.

*The comments in this appendix are shown as provided by stakeholders. Comments that appear similar or on a specific topic have been organized into categories. Comments that were repeated multiple times are grouped with the amount shown in parentheses. The comments have not been edited for grammar or punctuation to preserve the accuracy, feeling and/or meaning the stakeholder intended when providing the comment. Profane language and confidential information in the comments was redacted.*

## Licensing Objectives

### **Collaboration with Industry**

1. Outreach to members of professions that share clients with the boards professions. (ex. real estate)
2. Getting feedback from industry, especially after license renewals. Work with organizations to facilitate licensing of groups.
3. Continue to discuss licensing at NCEES sessions about what works and what doesn't work. Develop best practices to rely upon.

### **Continue Connect System Rollout**

1. Continue roll out of Connect system and continue to enhance.
2. Keep working with Connect.
3. Continuing with the development of the new system. Allowing licensees to do name changes in the new system. Being able to collect email addresses.
4. Continuing to focus on the connect platform or other electronic platform.

### **Explore Continuing Education Requirement**

1. Explore developing a continuing education component with the licensing process.

### **Maintain Status Quo**

1. Maintain status quo.

### **Promote Value of Licensure**

1. Do better job communicating advantages of licensure.
2. Continue to help people understand what licensing means.
3. Staying in tune with what society requires of the people the board licenses and knowing how to adjust licensing processes to accommodate this.
4. Outreach to state legislators.

### **Track Licensing Statistics**

1. Would be helpful for the board to be able to track statistics about licensees, i.e. how many people who have dual licenses, how many are currently active, etc.



## Application/Examination Objectives

### **Continue Connect Roll-Out**

1. Continue roll out of Connect system and continue to enhance.
2. Keep up with Connect implementation. Exams won't have significant involvement in Connect, but will be important on how to utilize Connect as a reference. How to get the most out of the Connect system for the exam unit.
3. Continue development of new system to have all license types able to apply online to speed up process for people to get licensed.
4. Examinations - Very important to focus on for the connect platform, as this is the next step in the process.
5. Transition to connect system and how to re-align staff with the change in day-to-day work.
6. Continue to focus on how to improve the process and not just duplicate the process in the virtual environment.
7. Revisit the technology side more closely.

### **Educate Applicants on Exam Process**

1. Opportunity to provide on the website pop-up/snapshot descriptions of the examination process to inform applicants taking the exam of what to expect.

### **Ensure Continuation of Exams**

1. How to continue testing when there is another pandemic.
2. To register and ensure the examiners are able to take their exams in light of the pandemic.
3. Not sure if effectively implementing new protocols - such as COVID related protocols. Keep in mind the pandemic situation and past objectives may not be obtained as easily due to the pandemic.

### **Focus on Customer Service**

1. "Being able to continue focusing on response times and answering questions in terms of transparency. "

### **Review and Update Standards**

1. Explore whether the current standards are appropriate for the current day challenges.

### **Seek Feedback on Online Application Process**

1. Seek input from applicants on the application process as it's coming online.
2. Ask for applicant feedback after application

## **Laws and Regulations Objectives**

### **Be Proactive**

1. Need to think outside the box and see how laws could potentially be misinterpreted.
2. Board might be more proactive in the legislative process.
3. Try to anticipate laws and regulations that may be brought forward by the board.  
Opportunity to educate and eclipse opportunity for irrelevant legislation. Board has opportunity to advocate and be a trailblazer.

### **Develop Legislation**

1. Work on legislation for the board to collect email addresses.

### **Expedite Rulemaking Process**

1. Continuing to work with DCA to develop ways to expedite approval of board proposed regulations.
2. Finding ways to shorten the processing time to regulation changes.

### **Prioritize Workload**

1. Moving forward with some of the regulations that the board has already approved.  
Better prioritization of the workload.

### **Succession Planning**

1. Board needs to make sure there is succession planning in place for when current AEO retires.
2. "Grooming next generation of staff to take on the role of interpreting the laws and regulations. Sign-on incentives. Recognize that these positions are special roles. "
3. Find very effective approach to pass on knowledge and expertise in case of succession planning.

## Enforcement Objectives

### **Continue Connect System Rollout**

1. Working on developing full and complete enforcement module in connect system, will help with tracking of cases, internally.

### **Educate Board Members on Process**

1. Explore developing an onboarding program to walk new board members through different levels of enforcement.

### **Educate Licensees**

1. Licensees and respondents to properly respect the board and its discipline.
2. How to support licensees so that regardless of where they got their license, they can understand what is required of them in CA.

### **Enforce Against Unlicensed Activity**

1. Looking for ways to have faster methods to actions and unlicensed activity, especially with unlicensed activity.
2. Would be helpful to have some legislation that would make unlicensed activity more of a deterrent.
3. Track technological developments that may facilitate unlicensed practice, and publicize to related professions and regulatory reviewers the risk of such unlicensed practice.
4. Board should focus more on unlicensed individuals.

### **Improve Quality of Subject Matter Experts**

1. Bigger pool of experts.
2. Could do a better job with SMEs who help on the enforcement cases.
3. Try to change regulation to pay higher to professional SMEs. Better outreach to gain SMEs.

### **Minimize Case Timelines**

1. Board should continue to focus on reducing number of days an investigative case is open.
2. Reduce or minimize the number of cases that take an exceptionally long time to resolve.
3. Identify ways to maintain and improve timelines in investigation process.

## Outreach Objectives

### **Educate Licensees**

1. Get licensees to continually be familiar with changes in legislation that affect their profession and read the BPELSG bulletins.

### **Educate on Connect System**

1. Develop some new trainings and webinars for the new Connect System.

### **Improve Outreach**

1. "Devoting more resources to outreach.
2. Improving those aspects of outreach which are more nuanced into the activities that are associated with unlicensed behavior. Utilizing the outreach to use as a tool to monitor what's impacting licensees and what's happening out in the world to identify changes that need to be made.
3. Expand outreach to include members of related professions and regulatory agency reviewers.
4. Creating a better pool for outreach, to accommodate for any staff turnover.

### **Improve Public Awareness**

1. Raising more awareness to importance of licensure, making sure licensees understand obligations, and making sure that general public use licensees appropriately and know who to contact when there are issues.
2. Explore the possibility of informing employers when one of their licensed employees has been disciplined, especially when the license has been revoked.
3. Collaborate with public agencies in informing them when some members have been disciplined to ensure that the outreach on disciplinary matters for members get communicated.
4. Explore improving outreach to the general public on member license status.
5. Outreach to agencies and updating the publication for agencies relating to the board's practices.

### **Increase Social Media Presence**

1. Find different ways to get the board's presence out there, perhaps on social media.
2. How to re-invent outreach on social media in post-pandemic world.

3. "Continue to have the staff elicit information from the board members.
4. More interviews with professionals for outreach purposes and to share information. "
5. Keep social media updated when connect system is available.

### **Online Videos**

1. Shoot a video of one of the online seminars and place it in website

## Customer Service Objectives

### **Improve Customer Service**

1. Explore improving outreach to the general public on member license status.
2. Clearly identify where shortcomings are and work towards way to improve from an overall perspective.
3. Continue to improve customer service to keep up standards.

### **Maintain Level of Customer Service**

1. Continue to maintain level of customer service to help licensees be compliant.

### **Modernize Customer Service**

1. Utilizing technology in customer service.
2. Determining how to modernize means of communication for the newer generation.
3. Continuing to implement connect program and bring online as fast as possible.

### **Performance Measures**

1. Provide board members with regular summaries of customer service complaints and resolution.
2. Would like to see specific metrics of performance for board members to see how the board is doing in this area.

### **Proactive Communication**

1. Having a way to better communicate with licensees and applicants, rather than just hoping they sign up for email list, follow on social media, etc.

### **Provide Consistent Customer Service**

1. Making sure that anyone who does interact with the public is providing consistent, correct, and accurate information.

### **Seek Feedback**

1. Request feedback

## Appendix E – Opportunities and Challenges

This appendix contains the qualitative data relating to trends affecting the Board collected during the surveys and interviews.

*The comments in this appendix are shown as provided by stakeholders. Comments that appear similar or on a specific topic have been organized into categories. Comments that were repeated multiple times are grouped with the amount shown in parentheses. The comments have not been edited for grammar or punctuation to preserve the accuracy, feeling and/or meaning the stakeholder intended when providing the comment. Profane language and confidential information in the comments were redacted.*

## Opportunities

The below comments are stakeholder responses to the question “Please describe opportunities that may positively impact the professions”.

### External Stakeholder Comments

#### **Climate Change**

1. Growing recognition of the impacts of climate change among the general public
2. Engineers of today and tomorrow will be called upon to find solutions to the effects of climate change.
3. Remote sensing is becoming more common, climate change considerations
4. Climate change mitigation

#### **Collaboration with Stakeholders**

1. Engineers are very committed to their profession and are a resource that is untapped
2. Communicate the us. Email "briefly" a forum for serving the consumer and professional within the confines of the laws and regulations for CA. Real Estate people do a good job of it. Talk to both consumer and professional.
3. Work with NCEES and URISA on Model Law and Model Rules to better define the roles of Land Surveyor.
4. You have an opportunity to better connect with employers. Having a way to post jobs for licensed, including Engineering In Training. I am particularly interested in the EITs because it is a great way for them to learn the field. I need to be able to search for that and I would definitely leverage the resource if it was available.
5. Get the best people to work at the governing jurisdictions for plan review.
6. Do not let lobbyists stop the need for licensing. Keep open communication with CLSA and other professional societies.
7. First - it's industries
8. There is a strong need for 1 or 2 college surveying programs in northern CA. There is an opportunity to work with ABET on this.
9. Provide Repository for Survey Records from deceased or retired Surveyors and Engineering & Surveying firms

#### **Comity Agreements**

1. The current federal funding environment provides a huge opportunity for Californians to enter the professions of engineering, surveying and geology. Technology also allows for



fewer barriers and differences in standards of care between geographies. Maybe California can pursue better comity agreements with western states?

### **Data Science**

1. Embracing data science (automation, machine learning, "smart" cities, etc.) in civil engineering

### **Diversity in Profession**

1. We need more new and diverse people in Land Surveying as a profession. We need to have a State wide effort to get people interested, trained, mentored, and licensed. Partnering with CLSA and other State agencies to create a marketing and education plan or some kind would be a big help to get young people into the industry.

### **Education**

1. support education by developing an alternative tract for professors trying to be licensed. we need to support the educators who are educating and supporting new licensees.
2. Faster results from testing
3. California is one of the few states without written technical standards. The practice of land surveying would be well served to adopt standards.
4. Engineering and other STEM professions are mostly in a state of anarchy. With easy access to meaningful computing and information resources, independents without any particular credentials can develop excellent applications and have rewarding careers if they work hard. Perhaps the age of the PE has ended.
5. Work to improve assessment of technical expertise and knowledge on new licensees.
6. Provide more suitable reference materials for taking the test. I only had the Hiner manuals and videos - which were good, but did not cover 30% of the test, making it difficult to pass the seismic.
7. Public information and transparency.

### **Effective Communication**

1. Board personnel needs to have better communication skills, managerial skills, personal skills, problem-solving skills, and be willing to assist professionals and applicants. That wall needs to go down. Geologists and engineers have professional skills as they relate to their profession, but board need people who have legal, managerial, business and communication skills who actually can resolve emerging problems and productively

assist both professionals and the applicants. The most important people who respond to inquiries and are willing to assist and resolve the issues. As of now as I mentioned before it is a wall and lack of communication.

### **Emerging Technology**

1. new technology, taught at the college level, will help the right projects get selected.
2. New technologies and methodologies are constantly introduced and evolving, but basic engineering fundamentals and practice generally remain absolute and unchanging.
3. New technology used in profession and keeping up with it
4. Keep ahead of the curve on technology. Especially scanning and drones, and make sure technology is being utilized by licensed individuals.
5. Embracing new technologies.
6. Develop policies that adapt to and incorporate technology (e.g. GIS and GPS) that can be used by non-licensed individuals without a professional's intervention.
7. Need to change direction on the trend to automate and base evaluation to online testing methods. These do not capture all necessary elements of licensing
8. EV development seems to include autonomous controls. These should be addressed rather than have the companies developing this regulate the results of their designs

### **Enforcement**

1. Better enforcement and testing could advance and improve base level of engineers
2. enforce what's there.
3. Hire more enforcement staff. Provide ID style pocket licenses similar to other practices and allow the DMV to photo, fingerprint, and print the cards. Update the Consumer Guide to Professional Engineering and Professional Land Surveying. Require continuing education and/or require period testing to confirm a licensee's knowledge and understanding of the law (fitness for practice). Communicate with the State's municipal and county engineers/surveyors.
4. take licenses from bad engineers, or restrict their practice.
5. Increase the level of enforcement so that unethical licensed individuals are revoked from practicing.
6. Increase beyond code minimum and increase enforcement to help create more resilient communities.
7. Provide enforcement and take action when complaints are filed.

### **Environmental Engineering**

1. There are authorities for Geotechnical, and Structural Engineering, it is time to have a new authority added for Environmental engineering within the practice of Civil engineering.

### **High School/University Outreach**

1. Out reach to High School Students to help them understand the opportunities in Engineering, Survey and Geology.
2. Increased outreach to engineering students and high school students interested in math & science.

### **Improved Wages for Examiners**

1. The cap on monies paid to "expert examiners", per case and lifetime make it difficult to attract examiners. It's basically a public duty and is generally performed at a monetary loss to the examiner.

### **Infrastructure Bill**

1. Infrastructure bill
2. The federal infrastructure bill,

### **Legislation/Regulation**

1. The State of California needs a concise Structural Engineering practice act to reduce incompetent practice of Structural Engineering.
2. Support legislation changes to existing statute to improve enforce of law.
3. It seems to me that there are common statutes that are consistently ignored or misunderstood by the professionals in practice. Perhaps a monthly news letter addressing important issues and the reason for those statutes would remind/educate why they are in place. Section 8761 and 8762 are the ones that come to mind.
4. Based on proposed legislation amendments, it appears that the Board is making an effort to address violations of current statute. In the event that the proposed changes pass and are made law, the Board MUST make every effort to inform the public of the changes and their intent. Additionally, they MUST start enforcing the laws and holding EVERYONE accountable to them.
5. Improve public safety in advance of a major earthquake by pushing for seismic building upgrade legislation.
6. support bills that keep dying to change the code performance criteria for buildings of significance (functional recovery bills).

## Miscellaneous

1. Up
2. Tradesmen/woman
3. See previous comments.
4. Review and modify the Corner Record form
5. The recent drastic collapse of the Florida condominium is an example of why licensed professionals should be able to bring deterioration to light and to fix things before disastrous failures.
6. More autonomy from DCA oversight.
7. send renewal reminders for licenses

## Not Applicable

1. I want to know when the legislature has forthcoming sunset attempts so I can contact them directly.

## Out-Of-State Licensure

1. Because I am in Florida and not many states license Fire Protection Engineers, you may find many out-of-state folks applying for license even though not residing in California.

## Outreach

1. Collect BPELSG news articles into a journal format, paid for with engineering firm ads
2. OUTREACH to retired engineers who will form a speaker's or Advocates-help group. Develop a panel which Media and Journalists can use for Expert opinions. AMA does this, why not Engineers?
3. "Update stakeholders on status and progress in a newsletter/e-mail. Increase in wildfire activity in California suggests more slope stability and flood evaluations will be warranted for land management. This may be an area to review to make sure it is adequately represented in exams and outreach."
4. A regular column in the Bulletin on where the outreach activities are going to happen, not just activities that have been done.

## Promote Need for Licensure

1. stop allowing contractors to perform land surveying without a land survey license.
2. More outreach about the profession and how to become a Licensed Surveyor.
3. outreach to civil engineering programs about the importance of Licensing

## Promote Professions

1. Assist to promote the profession, and work with the private surveyor.
2. maybe advertise and promote professions for public awareness
3. It would be great if the board could focus on protecting the profession as well as the public.
4. Look to expand newly evolving engineering fields.
5. Consider state licensure for GIS Professionals
6. Help non-engineers understand our methods of scientific problem solving. Help them to differentiate between a real engineer and someone who dumps their trash ... or drives a modern train.
7. Quality professional services are increasingly scarce commodities. Not that the quality is declining, but services are just hard to come by. There are limited practitioners. This is an opportunity to fully define and oversee the profession.
8. There needs to be a separate registration for "Professional Boundary/Property Surveyor"
9. adapt to current situation provide a path for experienced engineers to not have to request a waiver for EIT, they should be allowed to test just all others with an EIT as long as they have the 14 years. even then 14 years is a very unreasonable amount. how can a kid 2 years out of college be able to sit for a PE exam only because he was able to pass an 8 hr theory exam. why are we punishing those that are not good test takers nor have the financial stability to continuously pay for retesting and applications/waivers. The EIT provides no substantial evidence of the ability to become a professional engineer. i have managed EIT and non EITs and in most cases the non EITs will excel and work harder than those with an EIT who only understand theory but do not have the common sense to apply it. we should consider reducing the number of years to 5 years for all applicants regardless of EIT status. those first 5 years of workign as an engineer is crucial. the EIT is nothing more than a test that does not provide proof of an individuals capabilities.
10. Removing of the licensing exemption for the design of utility facilities. The board appears to be taking a wait and see type of position instead of attempting to lead the industry as California has been known for years.
11. Require INDEPENDENT engineering review of new construction, particularly high-rise and hillside developments.
12. The land surveying profession could be viewed as true professionals and therefore more valued with the consuming public.
13. Provide more information to groups associated with licensed professionals so that they may make informed decisions.

14. Requiring public works directors to be licensed engineers would be a positive.

### **Removal of Seismic Principles and Surveying Exams**

1. PE Civil candidates require two additional tests. Seismic Principals and Surveying. This is not in-line with other state boards, and causes a unnecessary burden on applicants. Additionally, It has discouraged students from perusing civil engineering compared to other avenues of engineering. The Board should consider removing this requirement.

### **Require Continuing Education**

1. Continuing education should be mandated.
2. The best way we are going to positively impact the profession of land surveying is by requiring continuing education.
3. Links to continuing education or ideas for finding continuing educations resources might be useful. I attend presentations with my local IEEE group which, as a EE, is really useful. Are there other opportunities?
4. California should require continuing education units. While it is perceived by some as a nuisance, my experience with some individuals leads me to conclude it is necessary.
5. Professional development hours (to encourage engineers, and their employers, to maintain current state of knowledge)
6. Explore continuing education requirement for California Registrants.

### **Technology**

1. Design automation and research reveal new and more effective ways of practice.
2. Showing our upcoming engineers their skills being put into use. In industry, for example my company uses hand calculation, 3D CAD design, simulation & destructive testing to certify product. When performed properly you can strongly correlate simulation to destructive testing.
3. "Consideration of a system as a role in a project design. Transportation projects should be designing taking in consideration the whole system and impacts in a long-term. Data analysis and statistics are becoming much more important in the project design Considerations of equity, safety and accountability should be important factors in project design"
4. Remote workers in the field of engineering, if applicable.
5. With pressure to expand internet access resulting in more construction in the increasingly congested public right-of-way, Section 6746 of the Professional Engineers

Act needs to be revised to require plans for telecom jobs be prepared by registered civil engineers.

6. I think much of the reporting required by law could be automated with the recent new systems rolled out (if not already done so)
7. Drone photography for surveying and site conditions
8. More provisions should be included and better guidance should be given in regards to electronic sealing of documents by engineers.

### **Title Protection**

1. "Revise the definition of ""engineer."" States like Ohio allow someone with a degree to refer to themselves as an ""Engineer,"" but a only registered engineer is allowed to refer to himself as a ""Professional Engineer.""
2. "PROTECT OUR TITLES. don't let engineers or unlicensed individuals use semantics. 'Structural Design Engineer' or 'Geotechnical Design Engineer' used by a civil engineer confuses the Public. do better.

### **Utilize Online Services for Education**

1. Given the increased use and recognized legitimacy of webinars and online courses, more online explanations and information sessions regarding engineering, license applications, and exams could be shared with potential license applicants and profession engineers on the boards website.
2. The increased usage of online examinations may provide more opportunities for qualified individuals to become licensed. Additional opportunities to better utilize technology to automate tedious tasks currently performed manually. Online training systems to improve training opportunities for professionals.
3. A collaboration with professional affiliations to make aware opportunities for online continued education and professional presentations would be great.
4. With COVID more and more groups are presenting online and distributing that information to a wider audience would be great.
5. Provide ZOOM webinars on new regulations
6. More open forums and/or online webinars to encourage feedback to the Board would be helpful.
7. The use of technology is always welcomed.

### **Younger Generation of Licensees**

1. Replace retired/soon to retire with new generation of young licensed professionals
2. better guidance and education to young professionals in the making

3. An entire generation of licensees is at retirement age and will require new licensees for the professions to continue to provide services to the public and state.
4. Support CSLA and fund/support opportunities to bring young people, especially minorities, into land surveying

## Internal Stakeholder Comments

### **Collaboration**

1. Collaboration - could work closely with other schools/organizations and continue to stay involved with what these organizations are doing. Keeping discussions with everyone and finding different ways to stay involved with job fairs.
2. Partnering and collaborating with stakeholders.
3. Associations could continue to be partners with the board - be advocates for licensure. Continued attention associations pay to the board and continue their commitment to supporting the board and letting the board know when they don't agree and why.
4. Getting more actively involved with the applicants, especially with the new connect system. Help get the applicants/licensees more informed.

### **Education**

1. Education on the importance of licensure. Important that keeping cooperation with schools/orgs. to make sure that the board does offer licensing in different disciplines. Education in schools is a great way for this to start.
2. Educational advances in the profession.
3. Recognize threat trends and improve communication on importance of licensure and consumer protection. Continue to monitor and maintain national presence to be prepared for what's happening.
4. Educational opportunities at a high school/college level. Many students who are planning to be an engineer do not realize the many disciplines that are involved. Would like to get the information at the high school/college level to better prepare them for the profession.
5. Professions should really focus on licensure. Only way the public can be confident in the professionals is if they are licensed. Industry impose more licensure on themselves.

### **Environmental**

1. Sustainability in project design - environment, social aspects, economy in mind. Which makes projects more expensive, but ultimately a better project. Opportunity for the board to have licensees keep up with these movements.



2. Increasing recognition by the public of climate change impacts related to the board's professions.

### **Outreach**

1. More and better outreach will provide the ability to communicate the important things the board does to the stakeholders and how and what they do protects the public.
2. "Learn to modernize and do more outreach for a younger generation. Post-pandemic - have more in-person community (open-house) meetings to welcome people back and re-introduce the board to the public. "
3. Outreach - utilize social tools to be more in touch and in communication with public and other stakeholders.

### **Political**

1. Opportunity to better serve the consumer by looking at some of the laws that have been written to protect union workforce at the expense of the public and other licensees licensed by the board.
2. "Help licensees and consumers in qualification based selection (part of Government Code starting at 4525)(Little Brook's Act) Board could help with this procurement. Will better serve the consumer. Get compliance from both sides - get compliance from RFQs and respondents to RFQ's"
3. Political trends - local ordinances.
4. Opportunity for traditional professions to embrace changes brought on by political and economic climates. Bring these professions to the 21st century and adapt, and help the board adjust their processes to accommodate those needs.

### **Technology**

1. Technology - always an opportunity. Right now implementing Connect, which is a right step towards the future. Trying to be more effective with the use of technology that's out there. Always possibility of putting the exam online so that people do not have to travel to take the exam.
2. Technology in the actual professions are rapidly changing.
3. Technological opportunities - New Connect system will help motivate to adapting to new technologies for board processes.
4. Change in technology. Professions can be very technology-driven with the various types of tools that they use. Opportunity for licensees to better serve their customers.
5. "Continued technology improvements. Board members more active at the educational level. "

6. New technology.
7. "NCEES (National Council of Examiners for Engineers and Surveyors) going to online examinations. Connect System."
8. "Technology and education. Working remotely."

## Challenges

The below comments are stakeholder responses to the question "Please describe challenges that may negatively impact the professions".

### External Stakeholder Comments

#### **Artificial Intelligence/Automation**

1. Avoid knee-jerk reactions to opportunities by automatically outlawing the use of new technology by the unlicensed.
2. Artificial Intelligence. Both the computer kind and the kind that is human that passed lessor exams and is out there practicing with little to no experience.
3. Drones.
4. Black box geospatial tools perform land surveying without the traditional quality control. Allowing innovation while protecting consumers will be a challenge.
5. Changes with computers, drones, etc. Automation.
6. Technology is changing how the work is performed. Equipment vendors and contractors believe that because new equipment does the work that the work is no longer covered by a licensed professional. This is in fact 100% the opposite. As a professional I am continuously redesigning work because some unlicensed person laid it out wrong and the overall project can no longer be constructed per the original plans.
7. New technology creeping into professional practice.
8. "Automation (software) of engineering services with limited oversight by licensed professional. Designs done by designers then "reviewed" and sealed by licensed professional.
9. Overseas engineering services by unlicensed and being sealed by licensed professional with limited charge."
10. Advancements in technology seem to make surveying easier for non-trained, non-licensed people. Hardware and software vendors market their products to people based on simplicity, with no regard to licensing rules and regulations.
11. As technology not only reduces the barriers to entry to all of these professions, it also reduces the barriers between geographies. There needs to be an emphasis on the professional judgement and teeth in enforcement against unlicensed practice.

12. Technology is making it easier and easier for non-licensed contractors to perform surveying. Small fines for non-licensed practice is not helping. More attention is given to licensed surveyors instead of unlicensed surveyors which is the MOST challenging negative impact. Our model of self policing is not solving the real issues. Current licensed surveyors could be dealt with less if we had continued education, but our main problem again is with the non-licensed practice.
13. New engineers can't seem to function without a computer telling them the answer.
14. Use and misuse of computer software without adequate practical experience
15. Embracing 3D modeling software.
16. Technology has its limitations. A sound fundamental knowledge base is essential. For example, what happens to the professional, when the power goes out? Technology with its multiple benefits is rendered useless. That is why the fundamentals and high standards of practice are so important--and should never be overlooked. Especially in field work.
17. Effect of new technologies on Surveying practice
18. Digital signatures and seals will make counterfeit plans very easy to generate. I'm glad to be near the end of my career--this is very concerning. Good luck.
19. COVID has impacted every industry. Working with people is largely remote. Getting the sense of someone's work, is more challenging than before due to lack of proximity. Getting the hands on so to speak is different now than ever before this will have an impact and or an opportunity for us grow
20. "Use of electronic signatures (difficult to control access to original documents)
21. Design-build contracts (as it impacts engineering laws and practice when working for contractors)"
22. Should think of ways to keep engineers up-to-date with the rapid development of new technologies.
23. The Board needs to warn stakeholders of known limitations as new techniques and tools are developed.

## **Budget**

1. Budget shortfalls and complacency.

## **Climate Change**

1. climate change may challenge current engineering norms,
2. Addressing climate change and the need to upgrade and maintain our vital infrastructure.

## Cybersecurity

1. Online examinations have security and integrity risks.

## Decrease in Number of Professionals

1. Retiring Land Surveyors are leaving fewer practicing professionals available. This is an important component of society, but if there is insufficient numbers in this field, the vacuum will be done by others (unlicensed) and there is nothing anyone will be able to do about it. That will be the first step towards deregulation of this profession in California.
2. Too few people entering the survey profession.
3. , lack of pipeline of future professionals from CA schools
4. Very few individuals are entering into this profession. The way industry is headed is in conflict with some of our laws and there needs to be more enforcement for those that are breaking the law.
5. An aging license pool. And those approaching retirement seem not to care about statute.
6. No replacement land surveyors which will lead to lowering of standards.
7. Getting more professionals in the industry through involvement with colleges.
8. Promoting surveying as a profession and recruiting people into the field.
9. Geoscience professionals are aging.
10. There are not enough Surveyors in California. It has been a big challenge in our area
11. The population demographics of potential new licensees is a declining pool.
12. There are not many PE's in businesses for someone to take responsibility for the testing and performance of autonomous vehicles
13. Amount of public works projects that require licensed individuals is increasing but the amount of licensed individuals that can competently run the projects is decreasing
14. "There is a shortage of land surveyors. While the total pool of LS and PRE-82 CE is about 11,000; there are around 2,900 people licensed as a LS since 1990. That represents a 30 year working career. Not a lot of actively practicing LSs. Because renewal fees are low and that there is no continuing education requirement, I believe that there is a significant number of retired people who are no longer practicing that are retaining their licenses.
15. To help fill this need, the Board should evaluate and streamline the process for CEs to obtain licensure as a LS; otherwise I foresee the state legislature taking a knee-jerk response to something that the Board should be addressed."
16. application turn around time, testing sites, testing format, the limited number of engineering professionals. is going to hinder progress and capital improvements. PE

should be tested not just on knowledge but also on the ability to apply said knowledge and practice. an 8 hr exam does not provide that. experience and application do.

17. Board was overly rigid allowing students to sit for GIT during COVID (re: mapping units) causing an undo burden on student and a disruption in geologist supply chain

### **De-Regulation of Professions**

1. deregulation of the geology profession
2. Protect licensure from those who want to eliminate it.
3. Lobbyists trying to get rid of the licensing requirement.
4. The weakening of state licenses at the national level. How do we strengthen the value of the CA licenses so others who are licenses in other states can't do work for CA -based Clients?
5. Important to maintain licensing/regulation as a practice - not only title regulation, as in some states. Maintain licensing. Reject efforts to deregulate professions,
6. Funding for the technical board. Do not let happen what happened in AZ, where the governor removed the requirement to be licensed to practice Geology and other licensed professions. The public must have protection against the very real risks of unlicensed individuals conducting work that may affect public safety.
7. Land surveying faces deregulation. Technology has altered the land surveying industry. This is true for many occupations and professions. The Board will be challenged with balancing the need for licensure - to protect the public - and the political forces demanding the deregulation of the professions.
8. Legislation that attempts to weaken licensing in the name of equity or providing special treatment of out of state engineers.

### **Devalue in Licensure**

1. "stereotypes public may not see the value in using licensed professionals"

### **Differences in Practices**

1. A continuing challenge is understanding (by licensees and public reviewing entities) the fundamental differences between the practice licenses of civil, mechanical, and electrical engineering, professional land surveying and professional geology, and the title licenses. Finding too often that the limitations on practice are not understood, potentially resulting in unlicensed practice by title license professionals.
2. The arcane system that heavily favors civil engineers does so to the detriment of other engineering fields. Most other states don't have this problem.

## **Education**

1. Educate the licensed professionals on the current building code and require additional testing to retain license based on changes to the code that should be know.

## **Enforcement**

1. Not providing enforcement.
2. Hard fines/disciplinary actions are not beneficial to the profession when we all are doing our best. Yes fines/disciplinary actions are needed with repeat offenders.
3. It can be easy focusing on being the police and not the chamber of commerce - enforcement is critical, but, encouraging good business practices, new surveyors to join the profession, and training in areas where there is too much enforcement would be great.

## **Experience Gap**

1. coding skills, and internship experience gap caused by COVID.
2. Disconnect between experienced licensee's and new licensee's - lack of mentorship
3. Today's young professionals need more guidance vs. the old or prevailing attitude that it is an individual responsibility. While it is true to a large extent, this attitude cannot prevail.
4. More older civil engineers are retiring and younger engineers are losing their on the job training wisdom

## **Job Encroachment**

1. Contractors trying to do land surveying.
2. Emerging technology like Unmanned Aerial Systems (drones) provide ways for unlicensed people to offer products and services within the realm of licensed practice. More oversight and enforcement is needed in this sector.

## **Lack of Business Modernization**

1. I am a recent applicant for the SE exam coming in October 2021. Why are applications paper and mail based, and why does it take a long time to get an update?
2. board is old school thinking and stuck in the past.

## **Lack of Structural Engineering Practice Act**

1. Lack of a Structural Engineering Practice Act endangers the public through the practice of structural engineering by less than competent engineers.

## **Laws and Regulations**

1. Don't bend/fall to peer pressure or comments from some wanting to be compared to other professions that require continuing education. Paying for a class to get credits is not continuing education.
2. Substituting education for experience when applying for a license. Experience is much more important than a formal education when performing a boundary/Property survey.
3. Coordinating various organizations calls for improved regulations
4. Emotional arguments that are shaping legislation and not using science to quantify impact to society are the biggest threat to any of the registered professions.
5. Regulatory climate is getting bad--way too much time spent on paperwork and it seems that the regulations are more obscure--not the boards regs--I'm talking about external to the board--which makes doing work more difficult in CA.
6. PUC-regulated telecom carriers will strongly oppose removing the exemption granted in Section 6746 of the Professional Engineers Act.
7. "Perhaps redundant with previous responses, but: 1. Revisit current regulations; systematically rewrite those portions that can readily lead to alternative interpretations, often detrimental to the licensee. 2. Verify that the former "Geology and Geophysics Board" rules and regulations are consistent with those of the current BPELS. There are seeming inconsistencies and these need to be pointed out to all licensees. 3. Be VERY CAREFUL that the Board is not being used by outside attorneys to bolster their particular cases. For example, complaints are filed against "expert witness licensees" by counsel for opposing sides. This "frivolous harassment" costs the accused licensee time, money, and mental anguish for response. It likewise costs the Board Enforcement mechanisms time and definitely monetary resources to "investigate" these cases. What a waste of licensee dues! In essence, the Board can - and is - increasingly used as "tool" for outside litigation. This is a current major weakness and definitely needs to be addressed! 2. "

## **Low Diversity**

1. The BOARD does not track whether licensees are male or female making statistics, especially in land surveying, difficult to know other than personal observation. I am

concerned that the low % of women in surveying will be taken as discriminatory at some point in the future.

2. Geoscience professionals lack diversity.

### **Lowered Standards of Practice**

1. Lowering of the standards of practice and the introduction of design regulation and building codes, which are fundamentally flawed in practice.
2. The profession has a few licensees who do very minimal work and do not meet the standard of care for professional engineers. Board's processes make it difficult to file complaints against these licensees.
3. Dilution of the profession by those who obtain on-line degrees and whose diploma says "engineer"
4. lowering standards to increase pass rate.
5. Additional challenges include the passing of poor legislation that undermines the value of licensed professionals and waters down the profession.
6. Many experienced engineers work in many States. There should be more standardized requirements among States for reciprocity in seeking licenses, either temporary or permanent, for out of state work.
7. Industry needing people to get projects done, they hire unqualified workers that are not properly supervised by a PE and plan stamping occurs.
8. the draft CA potable reuse regulations requires a licensed engineer with 5 years experience in water treatment and and wastewater treatment to review and stamp the report. From a professional career perspective that would be two separate engineers yet it is written as one person. this would impact approvals of DPR projects going forward.
9. Avoid cost-cutting measures that reduce the ability to evaluate license applicants more thoroughly
10. The trend towards fast-tracking certain applicants based on race, ethnicity or other factors is particularly concerning. I encourage the Board to accept ALL qualified candidates, regardless of their background, and process their applications to one standard. On a related note, many educational institutions are abandoning exams and issuing grades. As engineers, surveyors, and geologists, the Board must resist this destructive trend. We, collectively, must continue to trust hard empirical data and rely on rigorous testing to ensure that professional licensing candidates are fully qualified. Anything less will be an abandonment of our duty to the public, and a disservice to our professions.



## **Not Applicable**

1. this is none of your business
2. DCA
3. See previous comments.
4. too much black and white from engineers
5. The board is a regulatory agency. It is beyond the board's scope to address the broader issues of the profession. In asking the question demonstrates that the board has exceeded it's mission.

## **Out-of-State Practitioners**

1. Because I am in Florida and not many states license Fire Protection Engineers, you may find many out-of-state folks applying for license even though not residing in California.

## **Pay Disparity**

1. I anticipate a pay gap,
2. One of the most glaring challenges is the pay disparity for many people in the civil engineering (i.e. design) profession, particularly in the early stages of their career, as compared to others in other professions (i.e. FinTech, CS, etc.). Much of the top talent leaving the profession after graduating top civil engineering programs in search of more lucrative starting salaries in other jobs/careers. This is an ongoing concern with much of the civil/structural engineering profession across the country in general.
3. The economic realities of living in CA. The cost of education limits the number of students going for the profession.

## **Political/Outside Influences**

1. Push by conservative lawmakers to reduce regulation
2. The politicization of the process. The continued economic problems faced in California.
3. "Supermajority Politics = Monopoly. ALL Monopolies are BAD."
4. Politicians
5. Politics are always a challenging...business and industry don't generally embrace licensure.
6. all political agendas, not based on objectivity.
7. Anarchy. Popular mindset tearing down public processes.
8. Influence of developers and city officials on inspections and studies
9. CEs have way to much input, especially Caltrans.

## **Professional Recommendations**

1. Industry prefers not to have outside challenges to what they want to do. For example, ignoring recommendations to fix something now and preferring to put it off to later or forever. The Board should attempt to strengthen professional recommendations.

## **Public Awareness**

1. In my experience there is a large portion of the public that are uninformed of the current laws and how they apply to their professions. The Board must work with other licensing boards to make sure that ALL licensed professionals adhere to the laws.
2. Again, the general consumer is likely not aware of how the Board helps oversee PE's and LS's, and how to protect them from fraud, non-engineers posing as PE's.
3. Public Awareness of PLS as a profession.
4. One challenge is that the public does not understand that most buildings that engineers design are not earthquake proof. Most buildings are essentially just designed for life safety. I think this misunderstanding is unfortunate as the public doesn't understand the damage that will most likely occur in a significant seismic event and engineers will be blamed for not providing good building designs.

## **Require Continuing Education**

1. Continuing education.
2. Lots of old timers like me need extra training to stay current with Revit, Civil 3D and Sub. Map Act.
3. keeping us older registrants current with new practices and procedures.

## **Respect for Profession**

1. Board's customer service and lack of communication, lack of outreach, impossible to reach and get problems resolved by the board employers, unwillingness to help with all sorts of issues create severe problems. The board need personnel who is willing to "serve" the professionals and applicants; the board personnel needs to realize they are here fo professionals and applicants and not the other way around. The board needs to realize if that was not for professionals and applicants the board would not exist, so ignorant customer service and disrespect towards certified professionals or applicants who are reaching out to the board with their issues needs to be taken seriously and resolved in the best possible way for professional, with consideration of laws and policies but also with consideration of professionals' circumstances.

2. Corporations and other individuals continually demean, denigrate, and marginalize all engineering, both overtly and especially covertly.

### **Roles of Practitioners**

1. People not knowing the licensing law is to protect the public.
2. Help to increase understanding and reduce liability risk with better definition of providing beyond minimum code performance and advocate for legal, policy, and code changes to reduce risk for professional engineers.
3. Some practitioners may see themselves legitimately operating outside the bounds of engineering or geology. The Board's challenge is to keep up with changing industry trends and training of new practitioners.
4. Confusion over roles of Land Surveyor and GIS Professional
5. "Engineers have lost humbleness. Hubiris is real. An engineer must be confident in what they know and humble in what they do not. Now with the internet and computers, engineers are turned to a false sense of knowledge. You must find way to promote education, and not in the lame typical way that other states do continuing education. It must be meaningful knowledge gain. "
6. Safety
7. The strict interpretation of what makes a geologist, is becoming less relevant. Interdisciplinary academic and professional positions make modifying the old definition a necessity going forward.

### **Sunset of Board**

1. Sunset of underground tank fund

### **Technical Language**

1. The profession is becoming "more" technical. Talk to both professional and consumer in "simple" language

### **Technology**

1. Due to the current outdate technology in use by the board; the board system has been causing unfair procedural treatments to so many examinees. This outdated system contain mistakes effecting examines preventing opportunities. The current systems is full of systematic complications that are very length and extremely complicated to deal with, lots of qualified graduate engineers end up moving out of the CA state to obtain PE in another state and work there. Due to this complicated procedure. Many

engineers quit on the idea of obtain an engineering license in CA. There several problematic factors occur within the current system, the system is full of human errors, employee's corruptions, employees caused mistakes intentional and unintentional mistake when running examination results and evaluating the passing grades. It has always been said that CA is the Free State, yet CA thru the BPELSG has been nothing for me but red tape after another. These problematic issues of the exam system administration may get fixed many by having software's that will be error free, eliminate the unscientific test score method evaluation "the cut-score" method , and the software may also eliminate the ongoing employee negligence /corruptions while maintaining fair balanced evaluation process. Thank you very much for conducting this survey

2. Adapt to changes related to the need of incorporating data analysis in project design
3. "The so-called ""cost disease"" affecting infrastructure--causing things to take much longer and cost much more to build here than in other countries--is a long-term threat to American competitiveness. The Board needs to do its part to reduce this: simplify the licensing structure for engineers, and encourage responsible use of new technology and more efficient working methods."

### **Title Protection**

1. It is a fact that engineers, especially in large firms, now work in multiple states across and can be registered in other states (besides) California. Trying to punish engineers from outside the State for using the terms "P.E." on documents in California such as letters to clients in California will result in lawsuits and confusion. This needs to be addressed.
2. If there is a way to further protect a title that would help in some industries. For example an individual with no experience can call themselves a "Geologist" as the protected term is "Professional Geologist". This is frustrating in dealing with these unlicensed so called professionals. It is an issue I would like to discuss and get a better idea of how to handle.

### **Unlicensed Activity**

1. Pressure from unlicensed persons to override licensed decisions. This is a an insidious but common practice.
2. unlicensed practice. not enough new surveyors.
3. Non license personnel providing services such as UAS aerial mapping etc.
4. Unlicensed aerial mapping
5. Only challenges are if unqualified people gain licensure and individuals whom might falsely use a license.

6. People calling themselves "County Surveyor" but are not licensed . LACounty's [Name Redacted].
7. Unlicensed practice, especially contractor practice.
8. Poor definitional standards, technology and nonexistent enforcement against unlicensed practitioners could deregulate land surveying to the vanishing point
9. There is not enough regulation of online, non-licensed groups providing property line information.

### **Younger Generation Interest**

1. "Mentoring/inspiring younger generations to pursue professional license.
2. It appears to be a continuing challenge attract students to study math, science, and engineering.
3. Can't find young surveyors that have fire in their bellies or want to start at the bottom like we old farts have.
4. virtually no young people want to enter this over-regulated career
5. Since many schools and workplaces have been online in the past years, a lot of word-of-mouth advice about licensure that engineers share amongst themselves has decreased. This means that many engineers might have less information and guidance on the application process. This might results in more resources from the board being necessary to explain the application process to confused applicants.
6. The biggest challenge is the push to get more young people into STEM careers. In my case, an engineering career was intermittent employment by major aerospace companies, layoff when the contract was completed or cancelled, and personal financial hardship. Meanwhile, the flow of top engineering talent from outside the US continues. There is plenty of engineering skill available here... if employers would recall those that they laid off. Marxist-Lennonists call us "The army of industrial reserve."
7. Fewer graduates in engineering.

### Internal Stakeholder Comments

#### **Climate Change**

1. "Climate change and impacts of climate change. If board does not keep up with these trends, then licensees will not keep up with these trends. "

#### **Cybersecurity**

1. Hacking of the board's database, ransomware, need to have some sort of backup if lost of control of platform. Digital security.

## **Decrease in Applicants**

1. Low-volume of new applicants in licensee population, surveyors specifically.

## **De-Regulation of Professions**

1. Political - whenever a global event, the legislator wants to change everything, however the legislators don't always think the bills all the way through. Bills have come to the board looking to lessen requirements for people to be licensed. This could be dangerous, especially if it's reactive. Takes a lot of work from the board to respond to these bills. Could have threats towards consumer safety.
2. Discussions in land surveying community of de-regulation of the professions in other states. BPELSG should be mindful about this threat.
3. "National trend of de-regulation of the professions in other states. Unlicensed activity. "
4. Anti-regulation political environment on a national and state-level.
5. "From a national perspective - threat to licensing as something that the state does. Concerns of the board restricting access to the profession due to licensing. North Carolina Dental Board case, as an example. Organizations actively seeking to de-regulation the professions. Change in legislatures. "
6. Safety and regulations sometimes is more costly and there are a lot of pressure from industry to remove licensing entirely or soften the requirement.
7. "Lots of de-regulation of the professions in other US states. Lots of forces in other states trying to soften the requirements of licensing. "
8. Outside organizations/trade organizations from other states or outside CA may have different view of consumer protection/licensing requirements, etc.
9. "Academics teaching engineering, but themselves are not licensed. Some states are trying to de-regulate the professions, may negatively impact licensure in CA. Lowering requirements to complete work. "

## **Economy**

1. Economy could be a threat if it continues to decline.
2. "The economy and political landscape. Can threaten different aspects of the profession.

## **Pandemic**

1. COVID saw a huge down-turn in number of applicants. People couldn't afford to take exams, lost their jobs, or couldn't renew licenses.

## **Political**

1. " Political threat - partly represented by a Supreme Court decision from a few years ago of setting a precedent that licensing boards were anti-competitive. Tons of bills over the last few years that are trying to expand comity - extend licenses and privileges to those outside CA with titles (military spouses for example). Push back on these efforts to inappropriately extend licensure to people who may have not met CA standards for licensure. CA needs to continue being vigilant while understanding and acknowledging the advantages of having national standards, CA is a special place (size, geological variety, different conditions, etc), always have to make sure that our laws protect Californians and not watered down for national standards. "
2. If licensees are not aware of local ordinances, their products may be a threat to the consumers.
3. Political threats - recall election.

## **Public Perception**

1. Public Perception of the industry - especially in light of the condo collapse in Florida in terms of land surveying, engineering, and geology and whether the board is properly regulating those industries.
2. Cannot travel currently to certain states due to state limitations - devalues the relationship with the board.

## **Regulations**

1. "Legislative side - Regulatory changes being sought by individuals or industry groups that are attempting to restrain the board's authority.

## **Technology**

1. Technology - (especially in Land Surveying) continuing advances in GPS muddies the line between what is land surveying and what is not. Is a bit of a struggle to adequately define land surveying. Something the board needs to continue to be vigilant about and make sure that the definition of land surveying continues to be relevant and accurate.
2. If the industry do not keep up with the technology or educational
3. Technological developments that enable unlicensed practice.
4. Technology - Professions themselves having to adapt to certain use of technologies - unlicensed people and competition.

5. Change in technology. Professions can be very technology-driven with the various types of tools that they use. Unlicensed people thinking that they don't need to education or experience to do the work.
6. New technologies changing professions.

### **Unlicensed Activity**

1. Unlicensed practice, especially within land surveying.