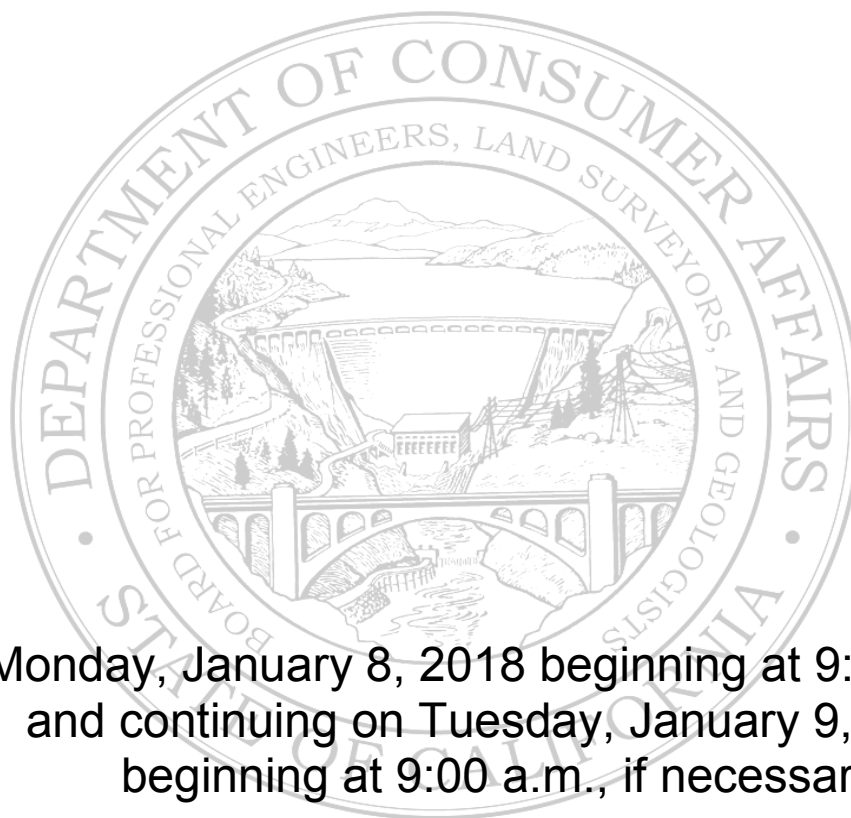




Governor Edmund G. Brown

# Board for Professional Engineers, Land Surveyors, and Geologists

## Meeting of the Board for Professional Engineers, Land Surveyors, and Geologists



Monday, January 8, 2018 beginning at 9:00 a.m.  
and continuing on Tuesday, January 9, 2018  
beginning at 9:00 a.m., if necessary

Department of Consumer Affairs  
1747 North Market Boulevard, Hearing Room  
Sacramento, CA 95834



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BOARD MEETING

JANUARY 8-9, 2018

Department of Consumer Affairs  
1747 North Market Boulevard, Hearing Room  
Sacramento, CA 95834

### BOARD MEMBERS

Eric Johnson, President; Betsy Mathieson, Vice President; Natalie Alavi; Fel Amistad; Kathy Jones Irish; Coby King; Asha Lang; Mohammad Qureshi; Karen Roberts; Jerry Silva; Robert Stockton; and Steve Wilson

#### **I. Roll Call to Establish a Quorum**

#### **II. Public Comment for Items Not on the Agenda**

**NOTE:** The Board cannot take action on items not on the agenda. The Board will also allow for Public Comment during the discussion of each item on the agenda. Please see the last page of this Official Notice and Agenda for additional information regarding Public Comment.

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#### **VI. Exams/Licensing**

A. Update on Fall 2017 Examinations

B. Adoption of Test Plan Specifications for the California Traffic Engineer Examination (Possible Action)

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B. Personnel

C. ABET

D. Association of State Boards of Geology (ASBOG)

1. American Institute of Professional Geologists (AIPG) – Proposal of New Membership Category to ASBOG (Possible action)

E. National Council of Examiners for Engineering and Surveying (NCEES)

F. Update on Business Process Improvement Study

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<p><b>VIII. Technical Advisory Committees (TACs)</b></p> <ul style="list-style-type: none"> <li>A. Assignment of Items to TACs (Possible Action)</li> <li>B. Appointment of TAC Members (Possible Action)</li> <li>C. Reports from the TACs (Possible Action)</li> </ul> <p><b>IX. President's Report/Board Member Activities</b></p> <p><b>X. Approval of Meeting Minutes</b> (Possible Action)</p> <ul style="list-style-type: none"> <li>A. Approval of the Minutes of the November 6, 2017, Board Meeting</li> </ul> <p><b>XI. Discussion Regarding Proposed Agenda Items for Next Board Meeting</b></p> <ul style="list-style-type: none"> <li>A. March 8-9, 2018, Board Meeting will be held at CSU, Fresno</li> </ul> <p><b>XII. Other Items Not Requiring Board Action</b></p> <p><b>XIII. Closed Session – The Board will meet in Closed Session to discuss, as needed:</b></p> <ul style="list-style-type: none"> <li>A. Personnel Matters [Pursuant to Government Code sections 11126(a) and (b)]</li> <li>B. Examination Procedures and Results [Pursuant to Government Code section 11126(c)(1)]</li> <li>C. Administrative Adjudication [Pursuant to Government Code section 11126(c)(3)]</li> <li>D. Pending Litigation [Pursuant to Government Code section 11126(e)] <ul style="list-style-type: none"> <li>1. <u>Thomas Lutge v. Richard B. Moore, in his capacity as the Executive Officer of the Board for Professional Engineers, Land Surveyors, and Geologists, Department of Consumer Affairs</u>, U.S. District Court, Eastern District, Case No. 2:17-CV-02290-KJM-EFB (Sacramento Superior Court Case No. 34-2012-80001329-CU-WM-GDS)</li> <li>2. <u>Lawrence Allen Stevens v. Board for Professional Engineers, Land Surveyors, and Geologists, Department of Consumer Affairs</u>, Sacramento Superior Court Case No. 34-2016-80002334</li> </ul> </li> </ul> <p><b>XIV. Open Session to Announce the Results of Closed Session</b></p> <p><b>XV. Adjourn</b></p>	
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## **I. Roll Call to Establish a Quorum**

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## **II. Public Comment for Items Not on the Agenda**

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**NOTE:** The Board cannot take action on items not on the agenda. The Board will also allow for Public Comment during the discussion of each item on the agenda. Please see the last page of this Official Notice and Agenda for additional information regarding Public Comment.



### **III. Administration**

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#### **A. Fiscal Year 2017/18 Budget Review**



**0770- Professional Engineers, Land Surveyors and Geologist  
Financial Statement**

Date Prepared  
December 27, 2017

	FY 2016-17 Month 5 (7/16-11/16)	FY 2017-18 Month 5 (7/17-11/17)	% Change	FY 2017-18 FM 1 Projections	FY 2017-18 Updated Projections	% Change
<b>Revenue</b>						
1 Applications/Licensing Fees (125700)	1,241,175	437,090	-65%	2,829,000	1,238,475	-56%
Renewal fees (125800)	4,648,550	2,936,690	-37%	6,138,000	6,988,038	14%
2 Delinquent fees (125900)	49,109	10,250	-79%	81,000	88,279	9%
Interest	16,290	No Data				
Other	181,845	No Data		134,000	126,209	-6%
<b>Total Revenue:</b>	<b>6,136,969</b>	<b>3,384,030</b>		<b>9,182,000</b>	<b>8,441,000</b>	<b>-8%</b>
<b>Expense</b>						
<b>Personnel Services:</b>						
3 Civil Service Perm.	1,342,703	1,213,690	-10%	2,962,803	2,980,000	1%
4 Temp Help	58,209	56,725	-3%	206,002	208,000	1%
Exam Proctor	2,732	0		5,082	6,557	29%
Board Members	3,100	2,000	-35%	6,433	7,200	12%
Committee Members	800	0		2,250	2,250	0%
Overtime	862			1,483	1,483	0%
<b>Total Salaries and Wages</b>	<b>1,408,406</b>	<b>1,272,415</b>		<b>3,184,053</b>	<b>3,205,490</b>	<b>1%</b>
<b>Total Benefits</b>	<b>748,075</b>	No Data		<b>1,528,585</b>	<b>1,589,166</b>	<b>4%</b>
<b>Total Personnel Services</b>	<b>2,156,481</b>	<b>1,272,415</b>		<b>4,712,638</b>	<b>4,794,656</b>	<b>2%</b>
<b>Operating Expense and Equipment:</b>						
Fingerprints	24,732	No Data		61,802	61,802	0%
General Expense	142,565	10,200	-93%	62,716	62,716	0%
Printing	13,109	5,703	-56%	50,332	50,332	0%
Communication	12,035	10,076	-16%	27,525	36,297	32%
Postage	26,298	1,502	-94%	83,707	83,707	0%
Travel Out-of-State	1,689	No Data		5,188	5,188	0%
Travel In State	43,065	No Data		113,054	113,054	0%
Training		710		430	430	0%
Facilities Operations	352,359	3,531	-99%	368,931	370,931	1%
5 C & P Services - Interdept.	300,000	500,000	67%	179,840	180,000	0%
C & P Services - External	431,382	48,000	-89%	375,299	476,549	27%
Minor Equipment	16,810	246	-99%	5,533	5,533	0%
Prorata	891,164	No Data		2,236,987	2,569,987	15%
<b>Total General Expenses:</b>	<b>2,255,208</b>	<b>579,968</b>		<b>3,571,341</b>	<b>4,016,523</b>	<b>12%</b>
<b>Examinations:</b>						
Exam Rent - Non State	0	1,282		245	3,000	1124%
Administrative External Svcs	963,830	707,505	-27%	713,143	713,143	0%
C/P Svcs - Ext Expert Examiners	76,592	216,907	183%	177,185	216,907	22%
Other Expense				5,177	5,177	0%
<b>Total Examinations:</b>	<b>1,040,422</b>	<b>925,694</b>		<b>895,750</b>	<b>938,227</b>	<b>5%</b>
<b>Enforcement:</b>						
Attorney General	159,275	142,460	-11%	438,759	438,759	0%
Office Admin. Hearing		700		92,113	92,113	0%
Evidence / Witness Fees	68,097	76,656	13%	241,016	214,516	-11%
Court Reporters	2,475	No Data		3,531	3,531	0%
DOI - Investigation	147,498	No Data		235,675	235,675	0%
<b>Total Enforcement:</b>	<b>377,345</b>	<b>219,815</b>	<b>-42%</b>	<b>1,011,094</b>	<b>984,594</b>	<b>-3%</b>
<b>Total OE&amp;E</b>	<b>3,672,975</b>	<b>1,725,478</b>	<b>-53%</b>	<b>5,478,184</b>	<b>5,939,344</b>	<b>8%</b>
<b>Total Expense:</b>	<b>5,829,456</b>	<b>2,997,893</b>	<b>-49%</b>	<b>10,190,822</b>	<b>10,734,000</b>	<b>5%</b>
<b>Total Revenue:</b>	6,136,969	3,384,030		9,182,000	8,441,000	
<b>Total Expense:</b>	5,829,456	2,997,893		10,190,822	10,734,000	
<b>Difference:</b>	<b>307,513</b>	<b>386,137</b>		<b>-1,008,822</b>	<b>-2,293,000</b>	

**Note:** The Board has not received our monthly fiscal tracking documents from the Department, therefore, no data is available for certain line items. The highlighted sections in Month 5 are projections based on data collected from various internal tracking documents.

## Financial Statement Notes

**FY 2017/18 Month 5 (7/17-11/17):** At this time, the Board has not received our monthly fiscal tracking documents. The data provided in the month five column was collected from various verifiable internal tracking documents. When reviewing expenditures, please note, the information provided is only a portion of the total expenditures allotted to that line item.

**FY 2017-18 Updated Projections:** The data provided in this section is an updated year-end projection of our expenditures and revenue based on the limited information currently obtainable.

- 1. Applications/Licensing Fees (125700):** On January 1st, 2017, the Board stopped collecting an application fee for refile applicants. Effective October 23, 2017, staff implemented a new application process, which eliminated final filing dates for Professional Engineer and Professional Land Surveyor applicants. Staff reasons these two changes in application operations have decreased the revenue collected from Applications/Licensing Fees (125700).
- 2. Delinquent fees (125900):** Delinquent fees are collected when a licensee fails to pay their renewal on time. This line item varies greatly throughout the year and from year-to-year. Therefore, it is difficult to predict with great accuracy the total revenue collected from this line item.
- 3. Civil Service Perm.:** The total number of authorized positions granted to our board increased and the number of more elevated classifications has increased. Additionally, the State granted a 4% cost of living increase to bargaining unit 1 and bargaining unit 4 represented employees.
- 4. Temp Help:** The board acquired additional in office temporary staffing this fiscal year.
- 5. C & P Services – Interdept:** The bulk of C & P Services Interdepartmental line item expenditures are allocated to Licensed State Employee Subject Matter Expert's for exam development. The full amount of the contract is encumbered at time of execution. Currently the board has 5 different interdepartmental contracts for exam development. Each contract is executed at one hundred thousand dollars. However, the Board does not anticipate the full amount of the contract will be used.



#### **IV. Legislation**

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- A. Legislative Calendar
- B. Legislative and Regulatory Proposals to Address Fee Inequities (Article 7 of Chapter 12.5 of Division 3 of the Business and Professions Code and Title 16, California Code of Regulations sections 407 and 3005) (Possible Action)



2018 TENTATIVE LEGISLATIVE CALENDAR
COMPILED BY THE OFFICE OF THE SECRETARY OF THE SENATE
Revised 11/16/16

DEADLINES

Table with 7 columns (S, M, T, W, TH, F, S) and 6 rows for January. Dates 1, 3, 10, 12, 15, 19, 26, 31 are highlighted.

- Jan. 1 Statutes take effect (Art. IV, Sec. 8(c)).
- Jan. 3 Legislature Reconvenes (J.R. 51(a)(4)).
- Jan. 10 Budget must be submitted by Governor (Art. IV, Sec. 12(a)).
- Jan. 12 Last day for policy committees to hear and report to fiscal committees fiscal bills introduced in their house in the odd-numbered year (J.R. 61(b)(1)).
- Jan. 15 Martin Luther King, Jr. Day.
- Jan. 19 Last day for any committee to hear and report to the floor bills introduced in that house in the odd-numbered year (J.R. 61(b)(2)). Last day to submit bill requests to the Office of Legislative Counsel.
- Jan. 31 Last day for each house to pass bills introduced in that house in the odd-numbered year (J.R. 61(b)(3), (Art. IV, Sec. 10(c)).

Table with 7 columns (S, M, T, W, TH, F, S) and 6 rows for February. Dates 16, 19, 23 are highlighted.

- Feb. 16 Last day for bills to be introduced (J.R. 61(b)(4), (J.R. 54(a)).
- Feb. 19 Presidents' Day.

Table with 7 columns (S, M, T, W, TH, F, S) and 6 rows for March. Dates 22, 30 are highlighted.

- Mar. 22 Spring Recess begins upon adjournment of this day's session (J.R. 51(b)(1)).
- Mar. 30 Cesar Chavez Day observed.

Table with 7 columns (S, M, T, W, TH, F, S) and 6 rows for April. Dates 2, 27 are highlighted.

- Apr. 2 Legislature Reconvenes from Spring Recess (J.R. 51(b)(1)).
- Apr. 27 Last day for policy committees to hear and report to fiscal committees fiscal bills introduced in their house (J.R. 61(b)(5)).

Table with 7 columns (S, M, T, W, TH, F, S) and 6 rows for May. Dates 11, 18, 25, 28 are highlighted.

- May 11 Last day for policy committees to hear and report to the floor nonfiscal bills introduced in their house (J.R. 61(b)(6)).
- May 18 Last day for policy committees to meet prior to June 4 (J.R. 61(b)(7)).
- May 25 Last day for fiscal committees to hear and report to the floor bills introduced in their house (J.R. 61(b)(8)). Last day for fiscal committees to meet prior to June 4 (J.R. 61(b)(9)).
- May 28 Memorial Day.
- May 29- June 1 Floor Session only. No committees, other than conference or Rules committees, may meet for any purpose (J.R. 61 (b)(10)).

\*Holiday schedule subject to Senate Rules committee approval

2018 TENTATIVE LEGISLATIVE CALENDAR  
COMPILED BY THE OFFICE OF THE SECRETARY OF THE SENATE  
Revised 11/16/16

JUNE						
S	M	T	W	TH	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

- June 1** Last day for each **house to pass bills** introduced in that house (J.R. 61(b)(11)).
- June 4** Committee meetings may resume (J.R. 61(b)(12)).
- June 15** Budget Bill must be passed by **midnight** (Art. IV, Sec. 12(c)(3)).
- June 28** Last day for a legislative measure to qualify for the Nov. 6 General Election ballot (Elections code Sec. 9040).
- June 29** Last day for **policy committees** to hear and report **fiscal bills** to fiscal committees (J.R. 61(b)(13)).

JULY						
S	M	T	W	TH	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

- July 4** Independence Day.
- July 6** Last day for **policy committees** to meet and report bills (J.R. 61(b)(14)). **Summer Recess** begins upon adjournment provided Budget Bill has been passed (J.R. 51(b)(2)).

AUGUST						
S	M	T	W	TH	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

- Aug. 6** **Legislature Reconvenes** (J.R. 51(b)(2)).
- Aug. 17** Last day for **fiscal committees** to meet and report bills (J.R. 61(b)(15)).
- Aug. 20-31** **Floor Session only.** No committees, other than Conference and Rules Committees, may meet for any purpose (J.R. 61(b)(16)).
- Aug. 24** Last day to **amend** on the floor (J.R. 61(b)(17)).
- Aug. 31** Last day for **each house to pass bills**, except bills that take effect immediately or bills in Extraordinary Session (Art. IV, Sec. 10(c), (J.R. 61(b)(18)). **Final Recess** begins upon adjournment (J.R. 51(b)(3)).

\*Holiday schedule subject to Senate Rules committee approval

IMPORTANT DATES OCCURRING DURING INTERIM STUDY RECESS

- 2018**
- Sept. 30 Last day for Governor to sign or veto bills passed by the Legislature before Sept. 1 and in the Governor’s possession on or after Sept. 1 (Art. IV, Sec. 10(b)(2)).
- Nov. 6 General Election
- Nov. 30 Adjournment *Sine Die* at midnight (Art. IV, Sec. 3(a)).
- Dec. 3 12 Noon convening of the 2019-20 Regular Session (Art. IV, Sec. 3(a)).
- 2019**
- Jan. 1 Statutes take effect (Art. IV, Sec. 8(c)).

**Board for Professional Engineers Land Surveyors and Geologists**  
**Legislative Proposal-Geologist and Geophysicist Act**  
**2017/2018 Legislative Session**  
**December 26, 2017**

In efforts to become a more fully integrated program, staff proposes legislative amendments be made to the Geologist and Geophysicist Act allied to creating a more consistent fee schedule for the Board's applicants and licensees. Staff recommends that the Board approve moving forward with these proposals by directing staff to seek an author to introduce this during the 2017/2018 legislation session. All proposals that are introduced as legislation will be presented to the Board as is done with any other legislation the Board is following.

The fee schedule for fees relating to Geologist and Geophysicist licenses is outlined in Section 7887 of the Business and Professions Code. This section establishes the various items for which the Board may charge fees, as well as indicating the statutory maximum that may be charged. Staff believes that some of the fees set in statute are not appropriate for the actual costs of the work associated with those fees, and that statute needs to be amended to address those issues.

**Legislative Proposal:**

**Business and Professions Code Section 7887 (a): (In-training Geologist fee to \$100)**

The fee for filing each application for certification as a geologist-in-training is fixed at not more than \$250. In contrast, the fee for filing each application for certification as an engineer-in-training or a land surveyor-in-training is fixed at not more than \$100. The cost incurred by the Board to process each in-training application is comparable. Staff reasons the fee to each in-training applicant should also be comparable.

**Business and Professions Code Section 7887 (b): (Eliminate the initial licensing fee)**

For engineers and land surveyors the application fee includes first-time licensure fee through the first renewal quarter after the license is issued. Approximately one to two months after being notified of being issued a license, first-time licensees will receive a renewal notice for payment of the full renewal fee. Once renewed, the license will be valid for an additional two (2) years. Geologists and geophysicists must take an additional step and apply for initial license certification after passing the appropriate examinations. Those eligible for initial license/certification receive notification from the Board regarding first time licensure. The initial license fee that is to be paid must be calculated by the applicant themselves based on several factors including their birth month and year (since the expiration day is the last day of their birth month and the expiration year is based on their birth year) and when they are submitting the form and payment. Staff recommends the Board eliminate unnecessary barriers towards licensure for geologists and geophysicists by adopting the simplified process recognized in the Professional Engineers and Professional Land Surveyors' Acts and eliminating the requirement to submit additional documentation and fees for their license.

**Business and Professions Code Section 7887 (c): (Transitioning documents fee to regulation)**

The Professional Engineers and Professional Land Surveyors' Acts authorize the supplementary document fees to be established by regulation. The Geologist and Geophysicist Act does not authorize the Board to establish the supplementary documents via regulation. Staff recommends transitioning power to the regulatory process for determining supplementary documents fees, such as duplicate certificate fees for geologists and geophysicists.

**Business and Professions Code Section 7887 (d) & (e): (Fix the renewal fee at \$400 for all disciplines)**

Subdivisions (d) & (e) designate different fees for renewals of different license types, which is contrary to the Professional Engineers Act, which designates one renewal fee for all license types. The language identified in Business and Professions Code section 7887 (d) designates the renewal fee at no more than \$400 for Professional Geologists and Professional Geophysicists. Section 7887(e) indicates that the renewal fee for a specialty geologist or specialty geophysicist shall be no more than \$100. In contrast, the Professional Engineers Act states that the renewal fee for each branch of professional engineering in which licensure is held, and the renewal fee for each authority level designation held, shall be fixed at not more than \$400.

**Business and Professions Code Section 7887 (h): (Eliminate \$100 examination fee limit)**

The first portion of Section 7887 (h) indicates that the examination fee for a geophysicist or certification as an engineering geologist or certification as a hydrogeologist is to be fixed by the Board (in regulation) at an amount equal to the actual cost to the Board for the development and maintenance of the written examination. However, the second portion limits the examination fee to no more than \$100. The actual costs incurred by the Board for the development and maintenance of the three exams exceeds \$100, thus causing a contradiction between the two provisions of this subdivision and preventing the Board from charging the appropriate fee for these three exams. Therefore, Board staff proposes amendments be made to the Section 7887 (h) to remove the \$100 restriction.

Please note the actual fee amounts are established in regulation through the rulemaking process, which requires the Board to provide specific justification for the actual dollar amount to be charged based on the actual costs incurred by the Board for those services.

**PROPOSED MOTION:**

Direct staff to seek an author to carry legislation to amend Business and Professions Code section 7887 as described above.

## **V. Enforcement**

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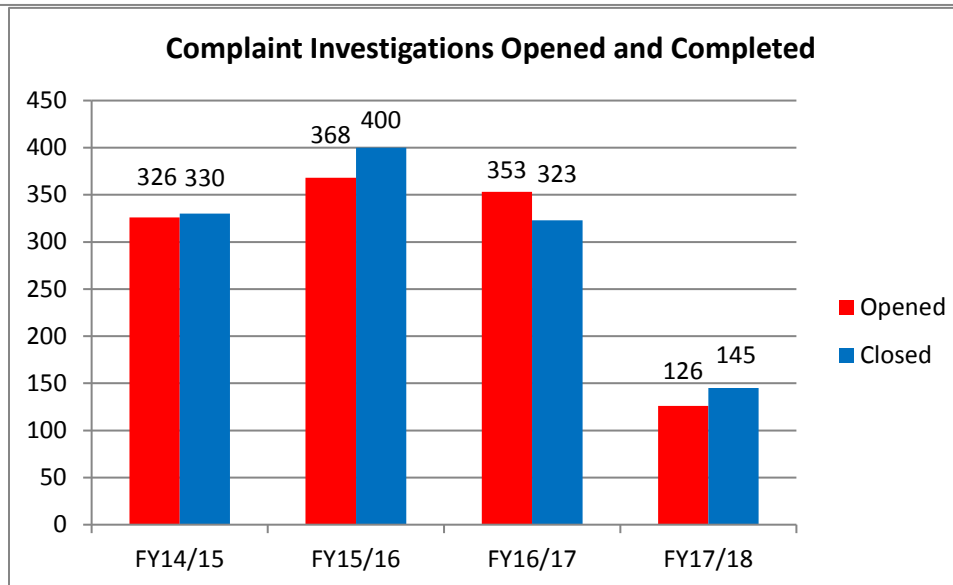
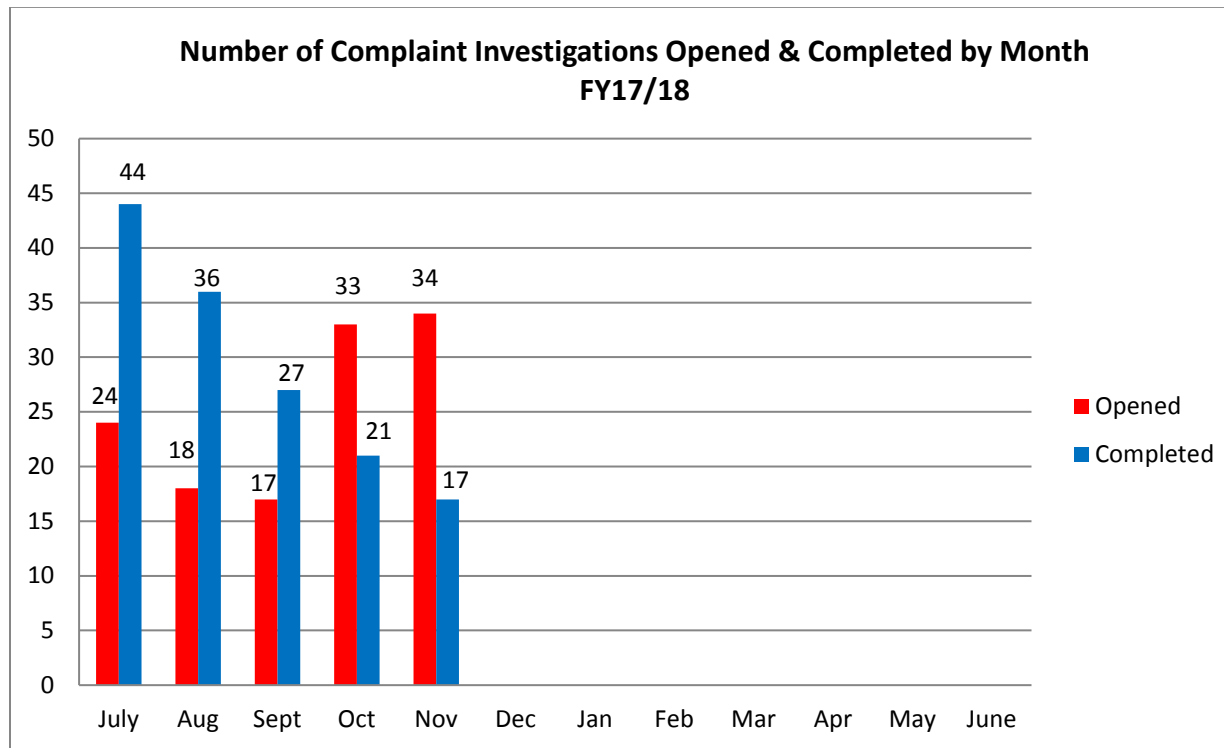
### **A. Enforcement Statistical Reports**

#### **1. Fiscal Year 2017/18 Update**



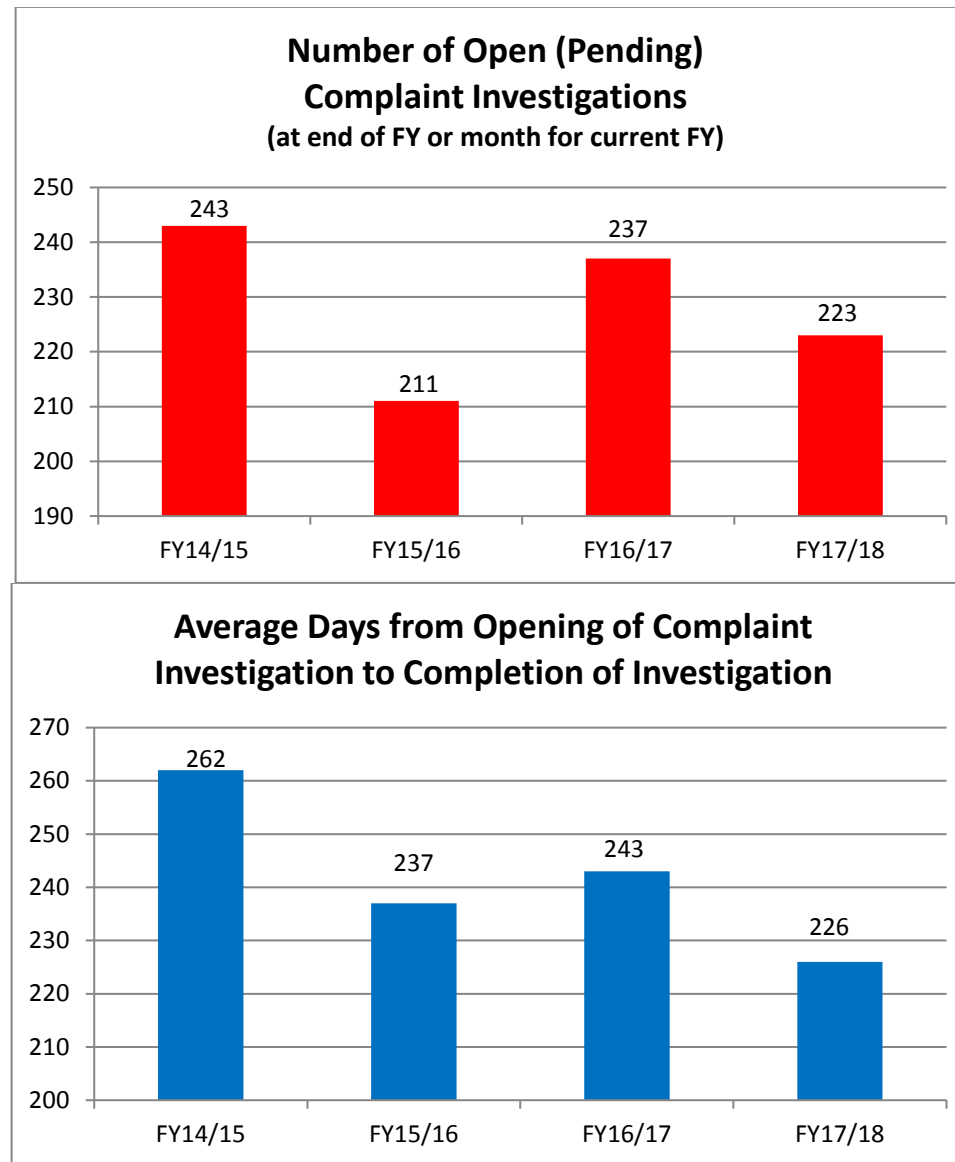


# Complaint Investigation Phase



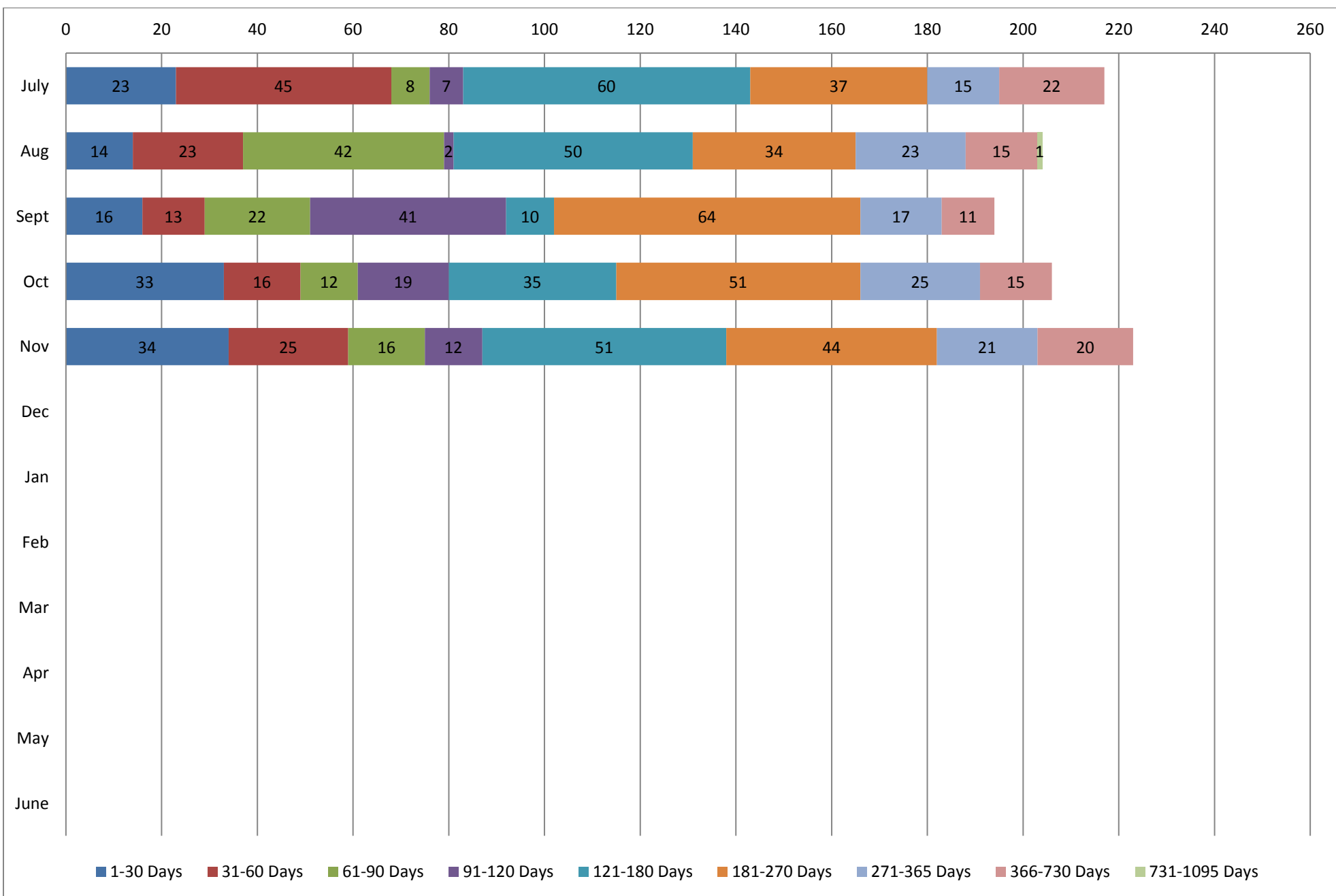
**NOTE: FY17/18 statistics are through November 30, 2017**

## Complaint Investigation Phase

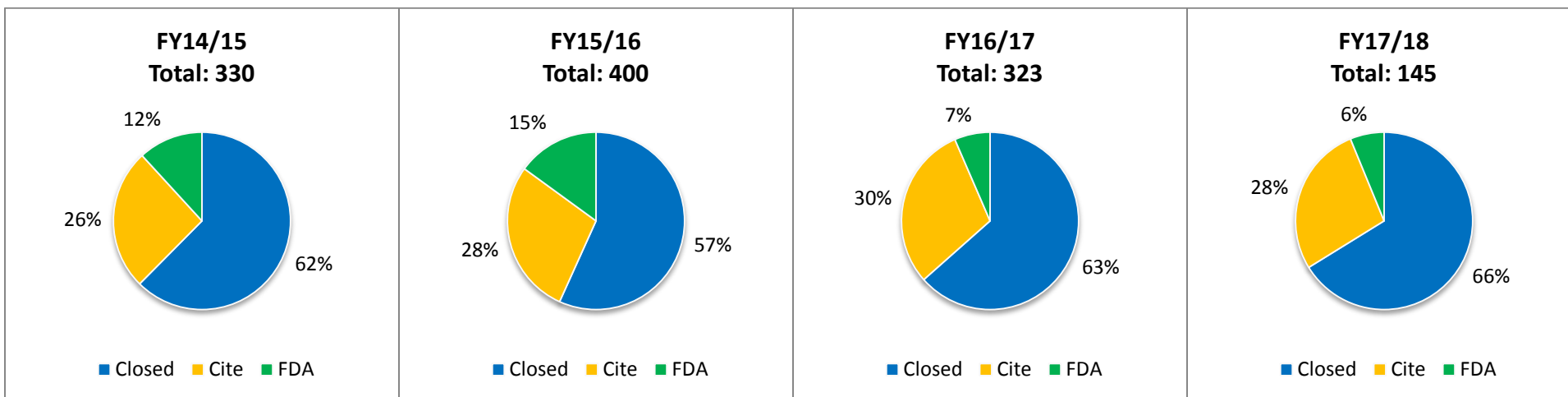
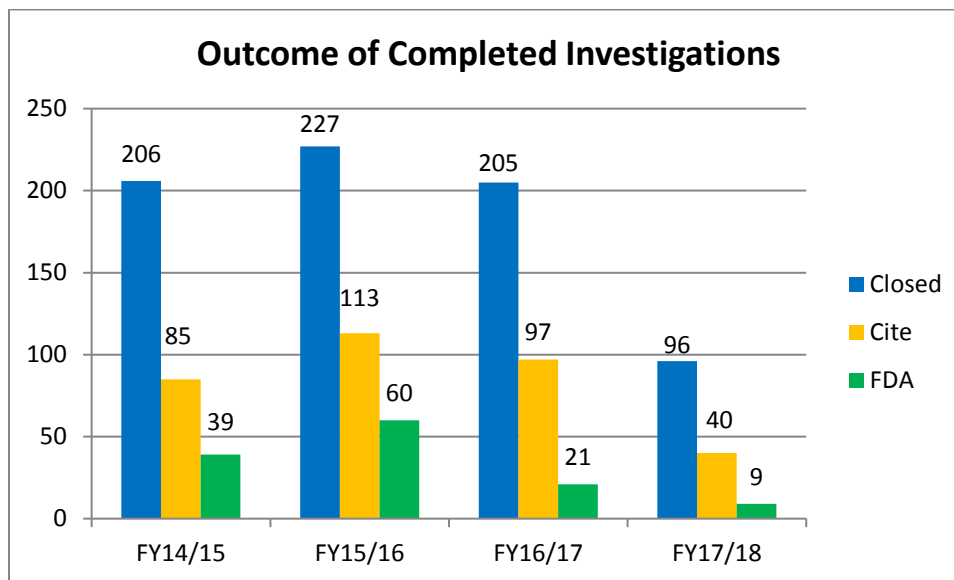


**NOTE: FY17/18 statistics are through November 30, 2017**

### Aging of Open (Pending) Complaint Investigation Cases – FY17/18



## Complaint Investigation Phase Outcome of Completed Investigations



**NOTE: FY17/18 statistics are through November 30, 2017**

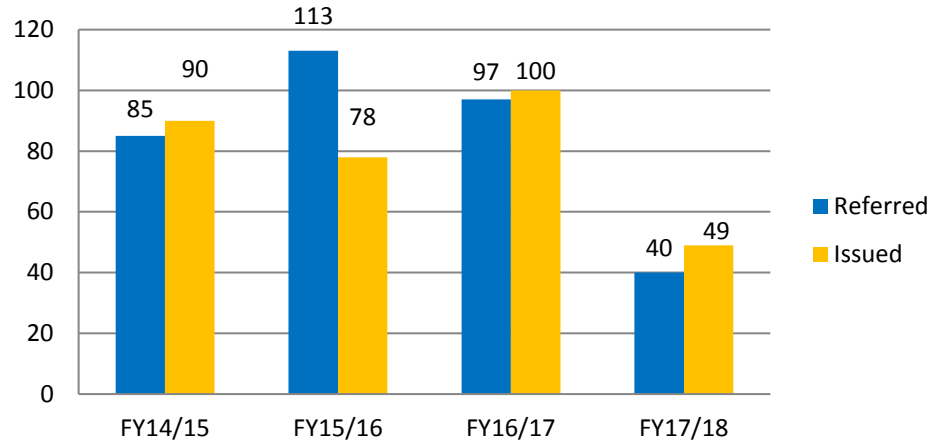
Closed = Closed with No Action Taken, includes the categories listed on the next page.

Cite = Referred for Issuance of Citation

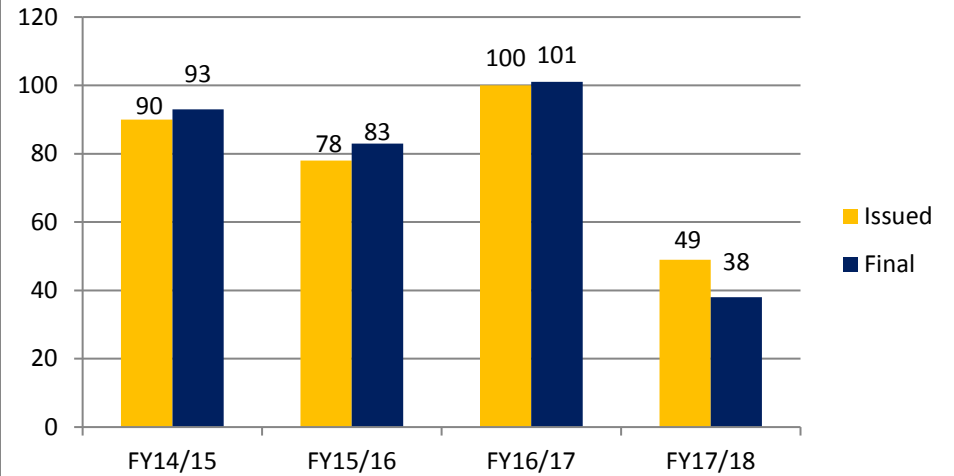
FDA = Referred for Formal Disciplinary Action

## Citations (Informal Enforcement Actions)

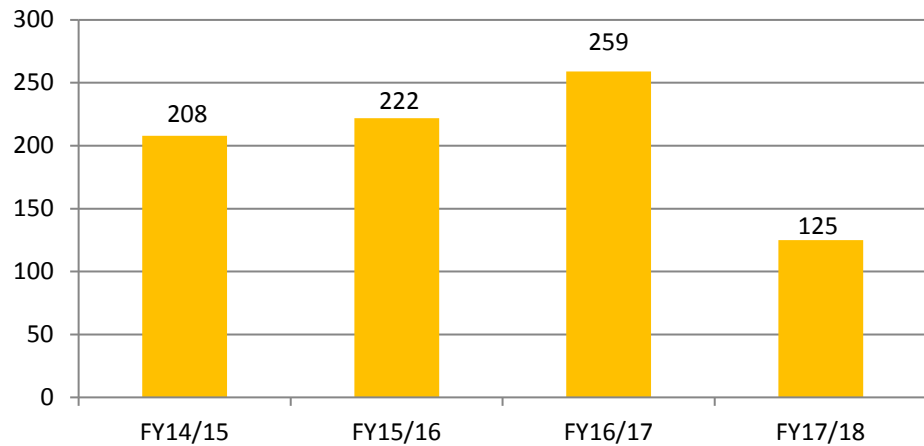
**Number of Complaint Investigations Referred and Number of Citations Issued**



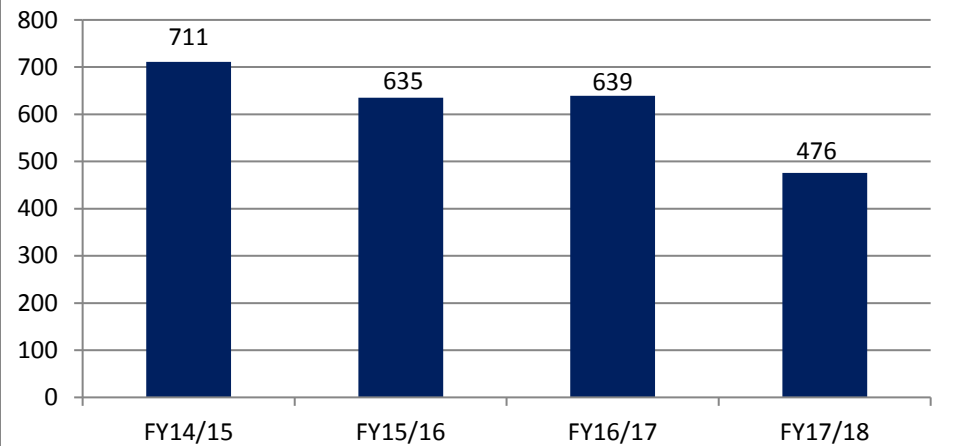
**Number of Citations Issued and Final**



**Average Days Between Date of Issuance of Citation and Date Citation Becomes Final**

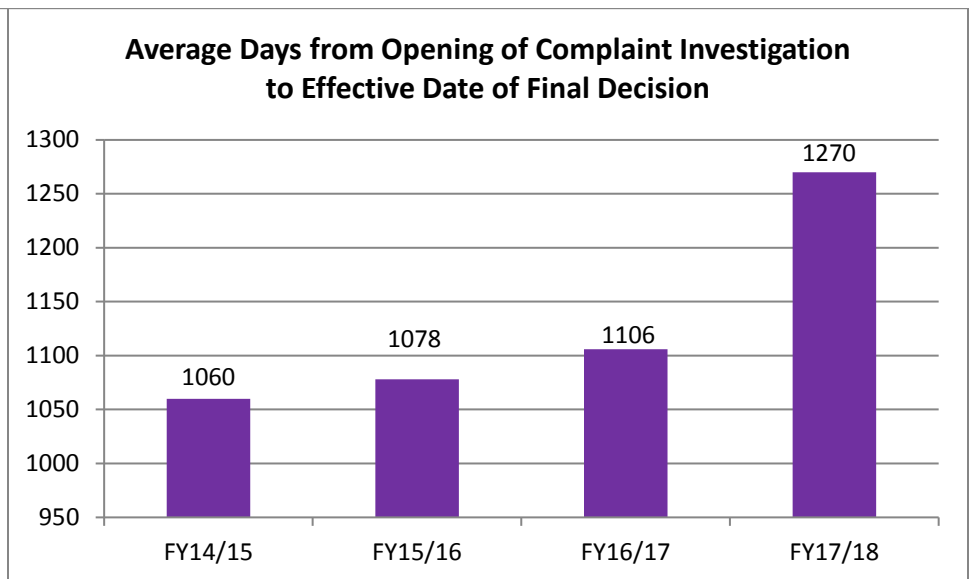
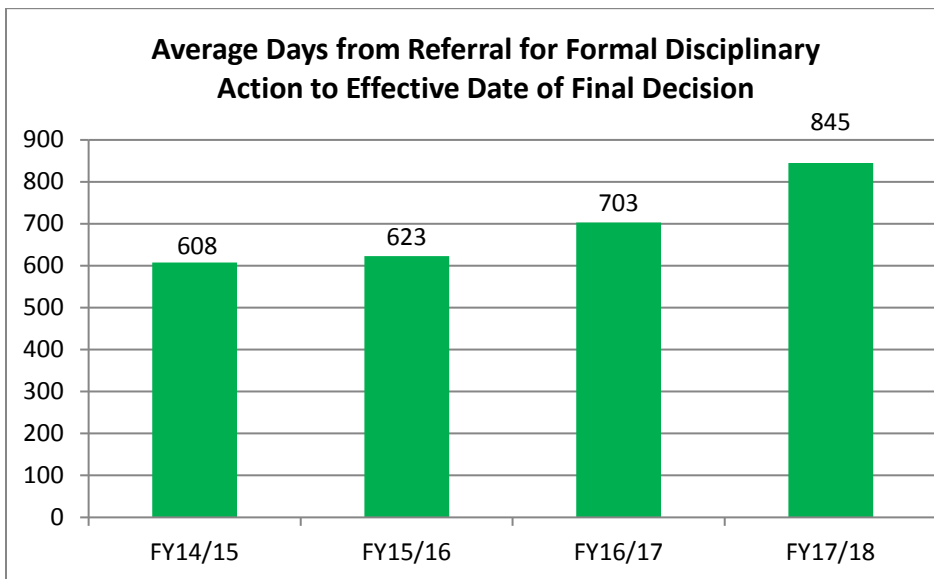
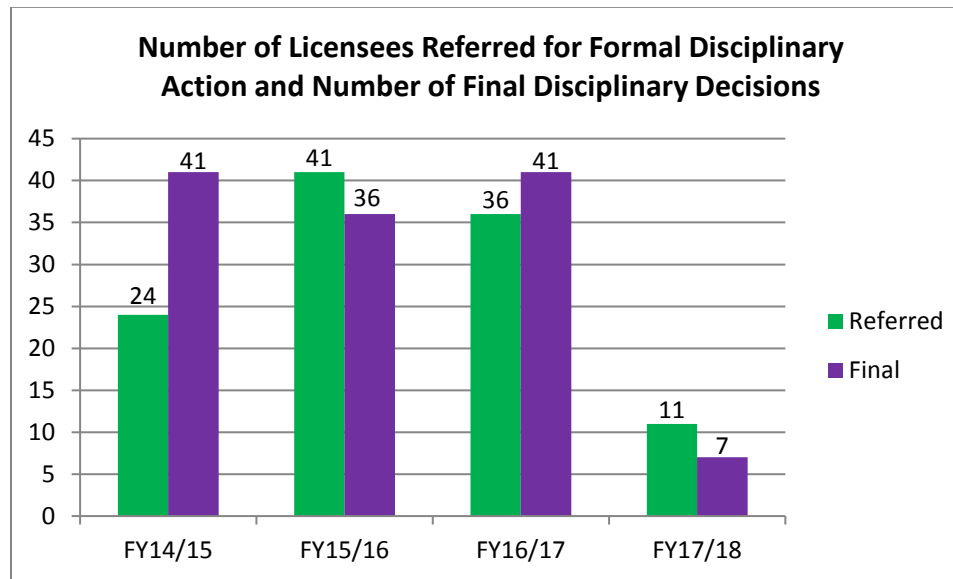


**Average Days from Opening of Complaint Investigation to Date Citation Becomes Final**



NOTE: FY17/18 statistics are through November 30, 2017

## Formal Disciplinary Actions Against Licensees



NOTE: FY17/18 statistics are through November 30, 2017

## **VI. Exams/Licensing**

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- A. Update on Fall 2017 Examinations
- B. Adoption of Test Plan Specifications for the California Traffic Engineer Examination (Possible Action)





# Fall 2017 State Specific Exam Results Professional Engineer, Land Surveyors, and Geology Examination Statistics

Civil Engineering Examinations				
	Pass	Fail	Total	Pass Rate
Seismic Principles	713	913	1,626	44%
Engineering Surveying	972	822	1,794	54%
Traffic	38	79	117	33%
Land Surveying Examinations				
Surveying (State Specific)	34	120	154	22%
Geotechnical Continuous Testing				
Geotechnical*	9	24	33	27%
Geology				
	Pass	Fail	Total	Pass Rate
California Specific Examination (CSE)	73	61	134	54%
Certified Engineering Geologist (CEG)	11	26	37	30%
Certified Hydrogeologist (CHG)	11	11	22	50%
Professional Geophysicist (PGp)	5	1	6	83%

\*Based on results through November 2017



<b>BPELSG Traffic Engineering Test Plan-2017</b>	
<b>50 Total Questions</b>	<b>Percentage of Questions on the Exam</b>
<b>I. Planning</b>  <u>Professional Activities:</u> 1. Perform capacity analyses of transportation facilities (e.g. facilities for pedestrians, bicycles, motorists, transit). 2. Evaluate traffic plans to ensure accommodation of current and future traffic volumes. 3. Estimate delays and queues at intersections. 4. Estimate traffic volumes produced by new developments. 5. Predict future parking demands of proposed developments. 6. Determine the costs and benefits of proposed capital improvement projects to prioritize funding. 7. Perform level of service analyses (LOS) of transportation facilities (e.g. facilities for pedestrians, bicycles, motorists, transit). 8. Evaluate circulation and access management for public and private development. 9. Conduct corridor analyses of alternative modes of travel to determine future transportation infrastructure. 10. Propose improvements to transportation infrastructure to accommodate changes in travel demand. 11. Conduct traffic impact studies to identify deficiencies. 12. Evaluate feasibility of proposed mitigation measures. 13. Perform safety analyses of transportation facilities (e.g. facilities for pedestrians, bicycles, motorists, transit). 14. Evaluate vehicle miles traveled (VMT) for proposed developments or roadway projects.	<b>28%</b>
<b>Test questions on these professional activities may include one or more of the following:</b>	
A. Techniques for performing level of service (LOS) analyses	
B. Techniques for calculating levels of service (LOS)	
C. Strategies to reduce travel demand	
D. Trip distribution techniques associated with traffic impact analysis	
E. Trip generation analysis techniques for various land uses	
F. The techniques to compute the capacity of transportation facilities (e.g. facilities for pedestrians, bicycles, motorists, transit)	
G. The techniques for evaluating the capacity of transportation facilities (e.g. facilities for pedestrians, bicycles, motorists, transit)	
H. The effect of new developments on access to adjacent roadways	
I. Roadway features that affect capacity	
J. Access management principles related to the improvement of traffic flow	
K. Circulation principles related to the improvement of traffic flow	

L. Techniques to determine traffic impacts	
M. Techniques to select mitigation measures based on constraints	
N. Techniques to measure the effectiveness of proposed mitigations	
O. Essential elements needed for traffic impact studies	
P. Methods for applying principles of the planning process to macro- and micro-simulation models	
Q. Techniques for conducting traffic flow studies	
R. The relationship between parking demand and individual land uses	
S. The effects of vehicle characteristics and volumes on transportation facilities (e.g. facilities for pedestrians, bicycles, motorists, transit)	
T. Calculating and evaluating vehicle miles traveled (VMT)	
U. Safety analyses techniques	
V. Multi-modal transportation facilities (e.g. facilities for pedestrians, bicycles, motorists, transit)	
W. Techniques for conducting queue analyses	
X. Cost-benefit analysis	
<b>II. Design</b>  <b>Professional Activities:</b> <b>1. Prepare plans, specifications and estimates for transportation facilities (e.g. facilities for pedestrians, bicycles, motorists, transit).</b> <b>2. Verify that transportation facilities (e.g. facilities for pedestrians, bicycles, motorists, transit) comply with Federal and State accessibility standards.</b> <b>3. Implement intelligent transportation system (ITS) measures.</b> <b>4. Select roadway safety devices such as guardrails, barriers, and crash cushions to improve safety.</b> <b>5. Select traffic calming devices and measures to improve traffic safety.</b> <b>6. Prepare parking facility layouts to maximize efficiency and circulation.</b> <b>7. Develop lighting systems on roadways.</b>	29%
<b>Test questions on these professional activities may include one or more of the following:</b>	
A. Principles and standards for the development of parking facilities	
B. Principles and standards for motorized and non-motorized transportation facilities (e.g. facilities for pedestrians, bicycles, motorists, transit)	
C. Principles for the design of driveways	
D. The effects of the mixtures and sizes of vehicles on roadway geometric design	
E. Applications of design standards to roadway improvements	
F. Applications of sight distance principles to roadway design	
G. Channelization guidelines to improve traffic flow	
H. Statutes and guidelines regarding accommodations for the disabled related to the design of transportation facilities (e.g. facilities for pedestrians, bicycles, motorists, transit)	
I. Techniques for designing transportation facilities (e.g. facilities for pedestrians, bicycles, motorists, transit) that takes into consideration users with disabilities	

J. Principles for the design of spacing and other aspects of roadway lighting	
K. Techniques for implementing intelligent transportation systems (ITS) technology to improve traffic flow and roadway safety	
L. Principles of bicycle facilities design	
M. The design and application of traffic calming devices and measures	
N. Principles and standards of the development of roundabouts	
O. Application of roadway safety devices and measures	
P. Principles and standards associated with the design of railroad crossings	
<b>III. Studies and Analyses</b>  <b>Professional Activities:</b> <b>1. Conduct field investigations of existing conditions to evaluate changes to traffic control devices and roadway designs.</b> <b>2. Identify traffic collision patterns and recommend improvements to transportation facilities (e.g. facilities for pedestrians, bicycles, motorists, transit).</b> <b>3. Conduct speed-zone surveys to assess speed limits.</b> <b>4. Perform parking studies for parking management and regulation development.</b> <b>5. Conduct queuing studies for transportation facilities (e.g. facilities for pedestrians, bicycles, motorists, transit).</b>	13%
Test questions on these professional activities may include one or more of the following:	
A. Methods for performing engineering and traffic surveys	
B. Techniques for analyzing collision data	
C. Methods to enhance safety	
D. Laws governing traffic control devices	
E. Principles for non-motorized safety improvements	
F. Techniques for conducting parking studies	
G. Techniques for conducting delay studies	
H. Techniques for conducting queuing studies	
I. Techniques for creating collision diagrams	
<b>IV. Operations</b>  <b>Professional Activities:</b> <b>1. Perform traffic engineering assessments to recommend placement of traffic control devices.</b> <b>2. Identify the need to install new traffic control devices.</b> <b>3. Evaluate signal timing to determine operational improvements.</b> <b>4. Modify traffic signal hardware to improve safety and operations.</b> <b>5. Recommend signal phasing based on operational needs.</b> <b>6. Evaluate traffic signal coordination.</b> <b>7. Develop temporary traffic control and detour plans to minimize delay and address worker and road user safety.</b> <b>8. Manage on-street parking.</b>	30%
Test questions on these professional activities may include one or more of the following:	
A. Laws and regulations governing on-street parking	

B. Measures that remedy traffic safety and operational deficiencies	
C. State standards for the identification and placement of signing, striping and markings	
D. Warrants for the installation of traffic signals	
E. Methods to optimize traffic flow using traffic signals	
F. Methods to factor transit priority into signal timing	
G. Techniques to develop traffic signal timing plans	
H. Principles of traffic signal design	
I. Traffic signal coordination timing	
J. Standards for temporary traffic control	
K. Types of traffic signal phasing	
L. Principles governing the type and location of traffic signal detection systems	
M. Principles of traffic signal preemption	
N. Methods for traffic signal interconnection	
O. Criteria for the installation of traffic control devices	
P. Criteria for roadway safety devices	
Q. Traffic control devices at transit and railroad facilities	
R. Channelization principles	
S. Passing, stopping, decision and corner sight distances	
T. Principles of adaptive signal timing	
U. Influence of horizontal and vertical alignment of roadways on traffic control devices	

## **VII. Executive Officer's Report**

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- A. Legislation and Regulation Workgroup Summary
- B. Personnel
- C. ABET
- D. Association of State Boards of Geology (ASBOG)
  - 1. American Institute of Professional Geologists (AIPG) – Proposal of New Membership Category to ASBOG (Possible action)
- E. National Council of Examiners for Engineering and Surveying (NCEES)
- F. Update on Business Process Improvement Study
  - 1. DCA Business Modernization Report





## **Legislation and Regulations Workgroup**

### **Legislation:**

Legislation can be found under the Legislation section in the Board meeting materials.

### **Regulations:**

#### **1. Geology Education (3031)**

- Concurrent review being done by DCA Regulations, Legal, and Budget Office.
  - Regulation language approved by DCA Legal August 16, 2017
  - DCA Legal approved initial package and sent to DCA Regulations Coordinator on August 30, 2017.

**Note:** Documents related to any rulemaking file listed as “noticed” can be obtained from the Board’s website at [http://www.bpelsg.ca.gov/about\\_us/rulemaking.shtml](http://www.bpelsg.ca.gov/about_us/rulemaking.shtml).

The DCA procedure for approving rulemaking proposals has changed. Geology Education (3031) is the first rulemaking package that will undergo the new procedures.



# AIPG Introduces New Member Category "Nationally Licensed Geologist"

R. Douglas Bartlett, CPG-08433  
Adam Heft, CPG-10265

At our January 21, 2017, Executive Committee Meeting in Orlando, FL, the ExCom Board authorized the formation of a new member category and professional title designated the Nationally Licensed Geologist or NLG. It is hoped that this new title will be recognized by the ASBOG states as a means by which NLGs can more quickly obtain permanent or temporary licenses to practice in those states that license geologists in the US.

The requirements for the NLG member category will include:

1. Certification as a Professional Geologist by AIPG (holding the CPG credential).

2. Successful passage of both the fundamentals and professional practice parts of the ASBOG exam.

3. Mandatory participation in AIPG's continuing professional development (CPD) program and the logging of at least 16 hours of CPD each year, including 1 hour devoted to professional ethics.

These requirements are intended to meet or exceed the most rigorous state regulations for geologic licensure in the United States.

## Why is the NLG category needed and why should AIPG take this on?

In recent years, there has been a concerted effort to deregulate professions and thereby ease the restrictions that limit individuals from entering those professions. This viewpoint originates from the libertarian idea that government should not be in the business of deciding who gets jobs. While this is an admirable concept, in practice it is far more complex than simply limiting who can work as a professional. Professional registration originated to safeguard the public from inferior or fraudulent work products. Registration, while not a per-

fect shield from problem practitioners, provides one mechanism to limit abuses and convey the importance of professional integrity to those who are licensed. If there were no geologic licensure and one individual in our profession were to do something that caused a scandal or injury to the public, the whole profession could become tainted in the public's eye, especially in this day and age with social media ready to pounce and quickly spread the word.

If governments retreat from managing professional licensure, we believe it is imperative that we (the geologic profession) police ourselves to prevent poor or unsafe work from occurring. This is for ethical reasons and for our own protection as a profession. AIPG is ideally suited to be the leader of professional licensure of geologists because our organization was founded to represent all disciplines of geology. Our members work in virtually every geologic field or discipline and while the distribution of membership in disciplines varies with the marketplace for geologic work, AIPG has striven to avoid focusing on any one discipline. Of prime importance to AIPG is the adherence to rigorous standards of ethical practice, one of the key drivers for licensure.

One of the requirements for maintaining the NLG will be the completion of 16 CPD hours per year including one hour of ethics training. David Abbott, in a separate paper for the Nashville meeting, describes the CPD concept and why it is so important that it be included in the NLG requirements.

By creating the NLG, AIPG is providing states with the opportunity to maintain a high degree of professionalism for geologists practicing in their states without the governmental bureaucracy needed to oversee and regulate geologists. Over time, as state statutes are changed to recognize the NLG, national licensure through AIPG will make is

easier for geologists to practice in multiple of states without having to pay numerous licensing fees. In this way, the NLG will provide mobility and cost savings to geologists.

## Facilitating Multi-state Licensing

Once an applicant has successfully applied for an NLG, the member will have support from AIPG to obtain licenses from other states that require licensure. AIPG headquarters will submit copies of transcripts, resumes, and related documents to state boards simplifying the licensing process in states recognizing the NLG title. The current President and Executive Director of ASBOG support AIPG's NLG concept and AIPG will be looking to ASBOG for assistance in setting up the program. The requirement to meet CPD hours per year can be met by simply keeping personal CPD records. If the member is audited, he/she can submit the personal CPD log to the auditor.

## What will this cost AIPG and its members?

The number of NLG members in AIPG will depend on the effort to deregulate geologists; the more rapidly and broadly this occurs the more geologists will seek the NLG membership in AIPG. At the moment, serious efforts to deregulate geologists are occurring in Arizona, Florida, and Illinois. We expect interest in the NLG will start slowly. It may or may not even catch on. The cost to AIPG will be minimal until such time that NLGs become as prevalent as CPGs. The cost of the NLG membership is initially proposed to be only \$30 more than the CPG member category, which is lower than what many states charge for licensure. Our intent is to provide a worthwhile service at a modest price.



## **VIII. Technical Advisory Committees (TACs)**

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- A. Assignment of Items to TACs (Possible Action)
- B. Appointment of TAC Members (Possible Action)
- C. Reports from the TACs (Possible Action)



**IX. President's Report/Board Member Activities**

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**X. Approval of Meeting Minutes** (Possible Action)

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A. Approval of the Minutes of the November 6, 2017, Board Meeting



**DRAFT**

**MINUTES OF THE BOARD FOR PROFESSIONAL ENGINEERS, LAND  
SURVEYORS, AND GEOLOGISTS**

Department of General Services  
3737 Main Street, Alvarado Room  
Riverside, CA 92501

Monday November 6, 2017, beginning at 9:00 a.m., and continuing on  
Tuesday, November 7, 2017, beginning at 9:00 a.m., if necessary

<b>Board Members Present:</b>	Eric Johnson, President; Fel Amistad; Kathy Jones Irish; Coby King; Asha Lang; Betsy Mathieson; Mohammad Qureshi; Karen Roberts; Robert Stockton; and Steve Wilson
<b>Board Members Absent:</b>	Natalie Alavi; Jerry Silva
<b>Board Staff Present:</b>	Ric Moore (Executive Officer); Nancy Eissler (Assistant Executive Officer); Tiffany Criswell (Enforcement Manager); Celina Calderone (Board Liaison); Gary Duke (Legal Counsel)

**I. Roll Call to Establish a Quorum**

President Johnson called the meeting to order at 9:00 a.m., and a quorum was established.

**II. Public Comment for Items Not on the Agenda**

No Public Comment.

**V. Legislation**

A. Legislative Calendar  
No report given.

B. Discussion of Legislation for 2017 :

**SB 547** (Hill): Professions and vocations: weights and measures  
(BreEZe annual report)

Ms. Eissler reported that the Bill was approved by the Governor on October 2, 2017.

**AB 1190** (Obernolte): Department of Consumer Affairs: BreEZe system  
(annual report)

Ms. Eissler reported that the Bill was vetoed by the Governor on October 7, 2017.

**VI. Administration**

A. Fiscal Year 2017/18 Budget Review

Mr. Moore indicated that the Board had not received the Fi\$cal Reports but is optimistic they will be available by the end of November in order to present them at the January meeting.

**B. Update on Agencies Transition to Fi\$Cal**

Mr. Moore took an opportunity to report the information that is tracked by the Board internally versus the information that is provided by the Department. He noted that the highlighted information in the meeting materials is information that the Board is able to provide.

**VII. Exams/Licensing**

**A. Update on Fall 2017 Examinations**

Mr. Moore reported that Prometric and exam staff have been busy with rescheduling candidates affected in the Houston, TX and Santa Rosa, CA area. Complete results will be available at the next meeting.

There was an issue with the San Bruno traffic exam site in which candidates appeared as scheduled and Prometric staff was unavailable to administer the exam due to a miscommunication in shifts. Two of the three candidates were accommodated. The third candidate opted to take the exam on another day.

**VIII. Enforcement**

**A. Enforcement Statistical Reports**

**1. Fiscal Year 2017/18 Update**

The Board was pleased with the direction of the aging of cases and statistics.

**III. Hearing on the Petition for Reinstatement of the Revoked License of Paul Christopher Ehe**

**IV. Closed Session – Administrative Adjudication [Pursuant to Government Code section 11126(c)(3)]**

The Board met in Closed Session following the Hearing on the Petition for Reinstatement to decide that matter.

**XV. Closed Session – The Board met in Closed Session to discuss, as needed:**

- A. Personnel Matters [Pursuant to Government Code sections 11126(a) and (b)]**
- B. Examination Procedures and Results [Pursuant to Government Code section 11126(c)(1)]**
- C. Administrative Adjudication [Pursuant to Government Code section 11126(c)(3)]**
- D. Pending Litigation [Pursuant to Government Code section 11126(e)]**

1. Lawrence Allen Stevens v. Board for Professional Engineers, Land Surveyors, and Geologists, Department of Consumer Affairs, Sacramento Superior Court Case No. 34-2016-80002334

**XVI. Open Session to Announce the Results of Closed Session**

During Closed Session, the Board took action on five stipulations and one proposed decision, discussed litigation as noticed, and directed the Administrative Law Judge to prepare the decision on the petition for reinstatement.

**IX. Executive Officer's Report**

A. Legislation and Regulation Workgroup Summary

Mr. Moore reported on the Geology Education regulation 3031. It is going through the new rulemaking process at DCA. Even though the Board has approved this regulation for notice, the Department's legal office and regulations coordinator must review it before it can be noticed for public comment.

B. Personnel

No report given.

C. ABET

Mr. Moore reported that ABET did send an email about ABET visits, but we never received it. One of the universities that went through the ABET process reported to Mr. Moore that the review of their program went very well.

D. Association of State Boards of Geology (ASBOG)

Mr. Moore reported that he received a report from Ms. Racca who attended the Annual Meeting in Portland, OR. The American Institute of Professional Geologists (AIPG) is seeking to create a new membership category. The category would be referred to as National Licensed Geologists, and AIPG is seeking ASBOG's support. If a member within this category passed the Fundamentals of Geology and the Professional Geologist exams and they submitted appropriate information to AIPG for certification, it would be recognized by licensing boards and, as a result, expedite the licensing process. It would function similar to that of the NCEES council record. Ms. Racca reported that there was significant opposition because the ASBOG members did not believe AIPG was the appropriate organization to adopt a council record type document for certification. Based on the opposition, AIPG agreed to reconsider proposal.

Mr. Moore reported that Ms. Racca provided a presentation on Computer Based Testing (CBT). She explained how the Board implemented CBT and some of the lessons learned. ASBOG expressed their apprehension. An executive committee member with ASBOG was concerned with the

possibility of computer hacking. The Executive Director requested Ms. Racca's assistance in moving forward in examining the CBT process.

ASBOG is requesting a list of core and elective courses for model regulations similar to that of the California Board's Rulemaking Proposal.

As of October 1, 2017, the geoscience program with the University of Arkansas, Little Rock is the first ABET accredited program for Geology.

E. National Council of Examiners for Engineering and Surveying (NCEES)  
No report given.

F. Outreach

Mr. Moore reported that the Board's outreach efforts focus on the licensing process and allow the professional associations to focus on efforts to encourage people to join the profession.

G. Update on Business Process Improvement Study

DCA Business Modernization Report

Mr. Moore reported that since the implementation of BreEZe for many boards, the Legislature has been interested in knowing what is happening with the remaining boards. The Office of Information Systems (OIS) at DCA assembled the Business Modernization Report in an effort to start responding to the Legislature and submitted it to Agency. Mr. Moore expressed his concern that the report generated by OIS may be perceived that it was developed by the Board. DCA's Deputy Director of OIS has been very receptive with concerns from the Board. Ms. Eissler explained that the report is going to be updated quarterly and noted that it is a living document and will continue to evolve. Ms. Mathieson is worried the legislature would be less than impressed if this document were to be presented to them. Mr. Moore added that the information contained in the document is DCA's perception of what the Board is doing based on a meeting that took place months ago. Ms. Irish asked if DCA will follow the Board in terms of the work already being done and how that information will be properly integrated. President Johnson took issue with the Board's logo on the title page as if the Board generated the document. Ms. Irish noted that this document highlights a disconnect between DCA and the Board. Mr. Stockton is concerned with the upcoming Sunset review and how the report will play into it. Mr. Moore will meet with the Director and pass along the Board's concerns and to see how to change the process of reporting the information.

Mr. Moore also reported that the staff is proceeding with the contract for a vendor to assist with the development of system requirements for Stage II. The Board received four good proposals. Unfortunately, the one selected accepted a permanent employment offer from the Department of General

Services (DGS). Therefore, staff is looking into what needs to be done to release the Request for Qualifications/Proposal again.

**X. Technical Advisory Committees (TACs)**

- A. Assignment of Items to TACs  
No report given.
- B. Appointment of TAC Members  
No report given.
- C. Reports from the TACs  
No report given.

Mr. Moore indicated that staff is working on scheduling a Traffic TAC meeting to finish up the items on their work plan as directed by the Board.

**XI. President's Report/Board Member Activities**

President Johnson participated in California State University, Sacramento's Industry Night. There were 120 juniors and seniors in attendance. The presentation outlined what employers are looking for and promoted licensure in the process.

Mr. Stockton added that Mr. Moore and Mr. Sweeney provided a presentation to the Industry Advisory Group for Land Surveyors in Riverside County.

Mr. Stockton added that he is a Guinness World Record authenticator. As a person legally authorized to practice land surveying, he was able to certify distance and slope for riding a bicycle backwards.

**XII. Approval of Meeting Minutes**

- A. Approval of the Minutes of the September 21, 2017, Board Meeting

<b>MOTION:</b>	Dr. Qureshi and Dr. Amistad moved to approve minutes as amended.
<b>VOTE:</b>	8-0, Motion Carried

Member Name	Yes	No	Abstain	Absent	Recusal
Eric Johnson	X				
Betsy Mathieson			X		
Natalie Alavi				X	
Fel Amistad	X				
Kathy Jones Irish	X				
Coby King	X				
Asha Lang			X		
Mohammad Qureshi	X				
Karen Roberts	X				
William Silva				X	
Robert Stockton	X				
Steve Wilson	X				

**XIII. Discussion Regarding Proposed Agenda Items for Next Board Meeting**

**A. 2018 Board Meeting Schedule**

The Board reviewed the 2018 Board meeting schedule and concluded that the Riverside and San Diego dates be switched so that the June 28-29 meeting will take place in San Diego and the December 13-14 meeting will take place in Riverside.

**XVI. Other Items Not Requiring Board Action**

Mr. Wilson inquired as to the status of the Executive Officer evaluation. Mr. King indicated that they are gathering additional comments and are in the process of finalizing it.

**XVII. Adjourn**

The meeting adjourned at 3:42 p.m.

**PUBLIC PRESENT**

Chris Ehe

Mark Norton, ASCE Region 9

Bob DeWitt, ACEC

Rob McMillan, CLSA



**XI. Discussion Regarding Proposed Agenda Items for Next Board Meeting**

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A. March 8-9, 2018, Board Meeting will be held at CSU, Fresno



## **XII. Other Items Not Requiring Board Action**

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**XIII. Closed Session – The Board will meet in Closed Session to discuss, as needed:**

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- A. Personnel Matters [Pursuant to Government Code sections 11126(a) and (b)]
- B. Examination Procedures and Results [Pursuant to Government Code section 11126(c)(1)]
- C. Administrative Adjudication [Pursuant to Government Code section 11126(c)(3)]
- D. Pending Litigation [Pursuant to Government Code section 11126(e)]
  - 3. Thomas Lutge v. Richard B. Moore, in his capacity as the Executive Officer of the Board for Professional Engineers, Land Surveyors, and Geologists, Department of Consumer Affairs, U.S. District Court, Eastern District, Case No. 2:17-CV-02290-KJM-EFB (Sacramento Superior Court Case No. 34-2012-80001329-CU-WM-GDS)
  - 4. Lawrence Allen Stevens v. Board for Professional Engineers, Land Surveyors, and Geologists, Department of Consumer Affairs, Sacramento Superior Court Case No. 34-2016-80002334



#### **XIV. Open Session to Announce the Results of Closed Session**





## XV. Adjourn

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