

California Underground Facilities Safe Excavation Board

First Annual Report

February 1, 2018

For a hard copy of this report, please contact the Underground Facilities Safe Excavation Board at the Office of the State Fire Marshal at (916) 445-8200. The report may also be accessed on the Board’s website at <https://digsafe.fire.ca.gov>.

Government Code § 4216.23

(a) Notwithstanding Section 10231.5, the board shall report to the Governor and the Legislature on or before February 1, 2018, and each year thereafter, on the activities of the board and any recommendations of the board.

(b) A report to be submitted pursuant to subdivision (a) shall be submitted in compliance with Section 9795.

Draft Seals

The Board does not yet have a seal, but not for lack of attempts. Here are several designs that didn’t make the cut.



Underground Facilities Safe Excavation Board

First Report to the Governor and Legislature

February 1, 2018

Board

Jessica Arden, Chair

Vince Bernacchi

Ron Bianchini

Randy Charland

Marjorie Del Toro

Bill Johns

Marshall Johnson

Carl Voss

Staff

Tony Marino, Executive Officer

Brittney Branaman, Policy and Budget Manager

Deborah Yang, Attorney

Jason Neyer, Program Analyst

Zachary Trammell, Program Analyst

<https://digsafe.fire.ca.gov/>

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Summary

This, the first annual report of the California Underground Facilities Safe Excavation Board, describes the Board's initial organizational steps and its 2018 plan. The Legislature established the Board in 2016 to investigate buried utility dig-in accidents, develop excavation safety standards, and coordinate the state's education and outreach programs (Gov't Code § 4216.12).

The first landmark events of the Board are as follows:

- **September 29, 2016**: Dig Safe Act of 2016 (SB 661 (Hill), Chapter 809, Statutes of 2016) signed by Governor Brown
- **July 1, 2017**: funding authorized by the Budget Act of 2017 (Chapter 14, Statutes of 2017)
- **December 18, 2017**: A quorum of members appointed
- **January 9, 2018**: Board holds first meeting in Sacramento

With a staff of five and more on the way, the Board expects to be fully staffed by the fourth quarter of 2018, following the hiring of investigators authorized in fiscal year 2018-19. Nonetheless, the Board will begin its work in earnest February 2018 with stakeholder workshops to support its four strategic objectives:

- *Create an Area of Continual Excavation Process*
 - The Legislature approved an annual one-call notification process for agricultural activities in lieu of monthly notifications. The Board needs to test, develop rules, and implement this program.
- *Develop an Education and Enforcement Program*
 - The Board must develop administrative processes to investigate accidents, recommend enforcement actions to the Contractors State License Board, Public Utilities Commission, and State Fire Marshal, and ensure educational opportunities exist to improve excavation safety.
- *Develop Processes for Continual Learning*
 - The Board must develop processes for program evaluation and industry safety assessment to evaluate proposals for further improvement.
- *Establish Stable Funding for Board Operations*
 - The Board must develop regulations to fund its operations.

The Board's 2018 activities supporting these strategic objectives are both regulatory and non-regulatory. To support these activities, events—either business meetings or workshops—are currently scheduled every month through June, with a schedule for the second half of the year to follow.

Members

The Board comprises nine appointed members—seven appointed by the Governor, one by the Speaker of the Assembly, and one by the Senate Rules Committee. Randy Charland was appointed by the Senate Rules Committee on September 19, 2017, while Jessica Arden, Vince Bernacchi, Ron Bianchini, Marjorie Del Toro, Bill Johns, Marshall Johnson, and Carl Voss were appointed by Governor Brown on December 18, 2017. The seat designated for an appointee of the Speaker of the Assembly is currently vacant. The Board met for the first time on January 9, 2018 in Sacramento.



Jessica Arden



Vince Bernacchi



Ron Bianchini



Randy Charland



Marjorie Del Toro



Bill Johns



Marshall Johnson



Carl Voss

Mission

The California Underground Facilities Safe Excavation Board improves public and worker safety by facilitating communication and learning among excavators and the operators of subsurface installations and by investigating accidents to determine their causes. The California Underground Facilities Safe Excavation Board strives to be a model regulatory and investigatory board for other states to emulate.¹

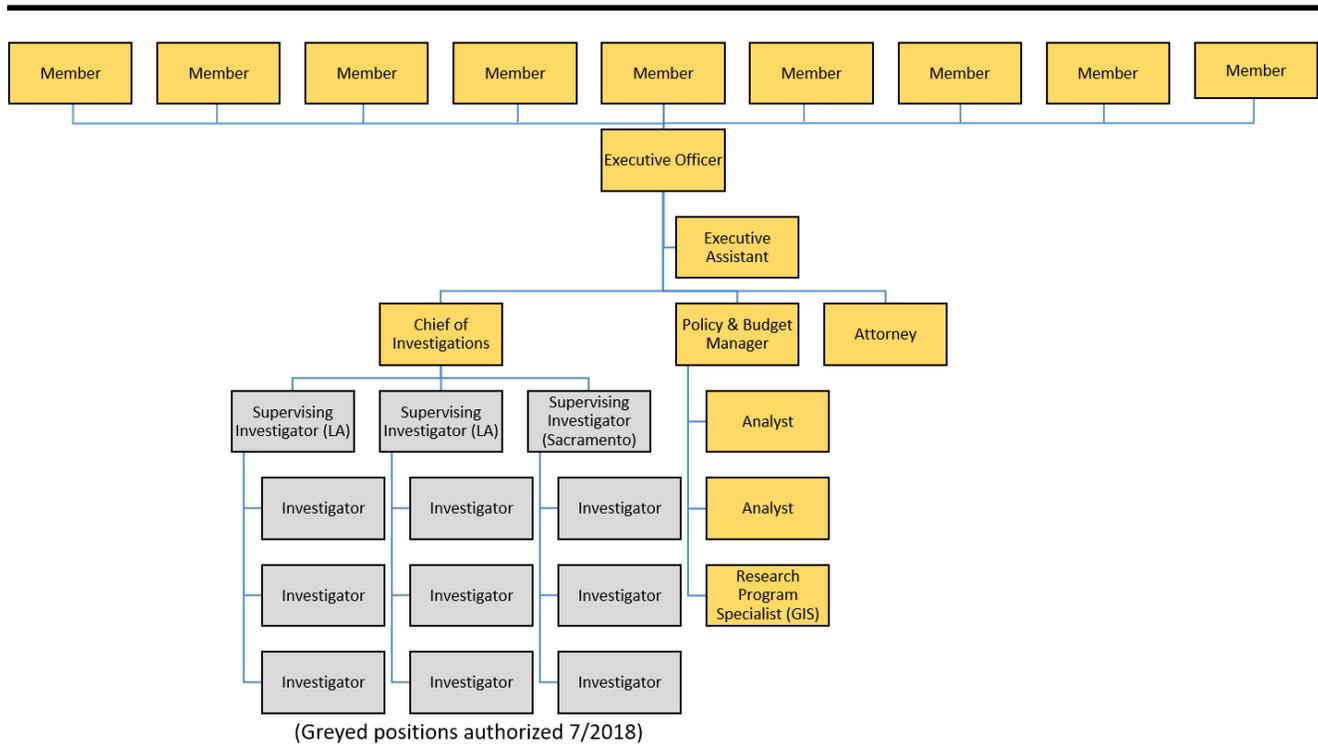
¹ Adopted as Board Policy B-02 on January 9, 2018.

Organization

The California Underground Facilities Safe Excavation Board was created by the Dig Safe Act of 2016 (SB 661 (Hill), Chapter 809, Statutes of 2016) to investigate accidents, develop excavation safety standards, and coordinate education and outreach programs. The Board receives administrative support from the Office of the State Fire Marshal and its parent the Department of Forestry and Fire Protection (CAL FIRE).

The Legislature authorized funding for the Board in the Budget Act of 2017 (Chapter 14, Statutes of 2017), including 21 positions—nine authorized for fiscal year 2017-18 twelve for the 2018-19 year. Year 1 hires are focused on board operations and regulation development, while year 2 hires are to be accident investigators. Currently, staff comprises an Executive Officer, a Policy and Budget Manager, an Attorney, and two Program Analysts. Staff is currently in the process of hiring an Executive Assistant and a Graphical Information Systems (GIS) Specialist, and the position class of the Chief of Investigations (Supervising Special Investigator II (Non-Peace Officer)) is currently under review by CalHR for CAL FIRE use.²

Chart 1: Organizational Chart



An analysis of 2015 natural gas dig-in accident data demonstrates that roughly 60% of the investigative work is expected to be in Southern California, staff expects to house nine of the

² Note that the ninth position authorized for 2017-18, the IT Specialist, was determined to be better suited for direction by CAL FIRE’s Chief Information Officer.

investigators, including the Chief of Investigations, in an office in the Los Angeles area, and staff is working with the state's Department of General Services to secure a lease by the time investigators are hired in Q3 and Q4, 2018.

2018 Plan

The Board has several milestones to meet, including the following:

- Be prepared to begin investigations by the beginning of 2019 (2017 Budget)
- Establish a funding source by July 1, 2019 (2017 Budget)
- Develop regulations regarding minimum standards for onsite meetings in areas of continual excavation by January 1, 2020 (GOV 4216.11)
- Begin enforcement of Board-jurisdictional actors on July 1, 2020 (GOV 4216.6)

During its first meeting on January 9, 2018, the Board reviewed and discussed the 2018 Plan for meeting these milestones. The plan may be found here:

<https://digsafe.fire.ca.gov/media/1198/2018annualplan.pdf>

The plan recognizes four strategic objectives and, for each, proposes one or more strategic activities to meet that objective. The strategic objectives and activities are as follows:

Strategic Objective: Create an Area of Continual Excavation Process

In passing the Dig Safe Act of 2016, the Legislature recognized that, while farming is excavation, existing law had not been well-suited to agricultural activities, and the Legislature charged the Board with creating an annual notification ticket system. Such a system has been implemented in Connecticut but is otherwise novel. Managing safety in these situations is a challenge, as the frequency of excavation damage is low, but the consequences are high (only 0.5%, or 26, of damages to the state's natural gas facilities in 2015 came from agriculture,³ but one of them was fatal).

- 1) *Outreach and Piloting*: As this type of notification process is new, the Board should spend significant attention to creating a system where compliance is well-suited to the business of agriculture. Doing so will require learning from agricultural operators of different varieties and testing ideas with agriculture, utilities, and the one-call centers. This activity is expected to be Board member-led.

Strategic Objective: Develop an Education and Enforcement Program

The Legislature's direction to the Board is to enforce the state's excavation safety laws progressively, treating ignorant non-conformances as opportunities to educate the excavation

³ California Regional Common Ground Alliance, "2015 Facility Event Report," p. 9.

community, using citations where education is deemed an insufficient incentive.⁴ To achieve this objective, the Legislature authorized the Board to hire thirteen investigative staff, twelve of whom are authorized for hire beginning July 1, 2018, to begin work in earnest in 2019.⁵ To prepare for these investigators, the Board will need to complete a number of activities:

- 1) *Identification of Relevant Education*: In order to recommend or offer education in lieu of financial penalties, the Board must identify relevant, affordable educational curricula and providers. Additionally, the Board must determine who must take such education in a landscape where companies may be sole owner-operators or may have hundreds to thousands of employees. This activity is expected to be Board member-led.
- 2) *Standards for Demonstrating Compliance*: The Board will need a process for determining the facts surrounding accidents if it is to complete investigations in an efficient and timely manner. The Legislature anticipated this need in requiring the Board to develop a standard for subsurface installation operators and excavators to demonstrate compliance with one call notification, delineation, and locate and mark requirements.⁶ This element is non-regulatory, and needs to be developed prior to 2019. This activity is expected to be Board member-led.
- 3) *Board Notification of Incidents*: Roughly five thousand incidents involving excavation damage to natural gas pipelines occur annually in California.⁷ Thousands more are known to impact the state's other subsurface installations.⁸ Of these, however, only about 100 are reported in a timely manner to the state's Public Utilities Commission,⁹ with a handful of others reported to the Office of the State Fire Marshall. Authorities from other states who depend solely on voluntary reporting receive only a handful of reports and thus investigate dramatically fewer incidents than state authorities who require it. Therefore, some form of reporting process will need to be adopted through regulation in advance of investigators commencing work at the beginning of 2019. This activity is expected to be Board member-led.
- 4) *Inter-Agency Enforcement Coordination*: The Board is expected to enforce the state's safe excavation law on a small segment of the excavation community. Instead, the bulk of violations that the Board finds will be forwarded to the Contractors State License Board, the Public Utilities Commission, and the Office of the State Fire Marshal to act on,¹⁰ as those entities regulate actors performing a majority of the state's non-exempt excavation and locate-and-mark work. The Board must coordinate with these state agencies, likely entering into memoranda of understanding, so that the Board provides investigations and recommendations these agencies can act on and so that the agencies can effectively process the enforcement cases. These activities

⁴ GOV 4216.19 (d).

⁵ 3540-240-BCP-2017-GB, http://web1a.esd.dof.ca.gov/Documents/bcp/1718/FY1718_ORG3540_BCP1248.pdf

⁶ GOV 4216.18.

⁷ California Regional Common Ground Alliance, "2015 Facility Event Report."

⁸ Common Ground Alliance, 2017 Damage Incident Reporting Tool Interactive Tool.

<http://commongroundalliance.com/dirt-2016-interactive-report>

⁹ Crowe Horwath, *Gas Safety and Reliability Branch Management and Operations Review: Report and Recommendations*, February 23, 2015, p. 1-6.

¹⁰ GOV 4216.6 (c).

will influence the development of enforcement regulations. This activity began in autumn of 2017 and is expected to be staff-led.

Strategic Objective: Develop Processes for Continual Learning

A healthy safety culture is one that has processes for continual learning and promotes communication between stakeholders. The Legislature gave the Board the responsibility not solely for developing regulations to carry out the prescriptive elements of law but also charged the Board with developing standards and making recommendations to the Legislature for improvement.

- 1) *Baseline Safety Assessment*: Neither the Legislature nor stakeholders will be able to gauge the Board's success in making California excavation safer without a baseline assessment of how safe California is today. The process of creating a baseline assessment will allow the Board to develop analytical approaches to program evaluation that may prove useful during legislative review in 2020. This activity is non-regulatory and is expected to be Board member-led.
- 2) *Reasonable Care Standards*: The Legislature charged the Board with the development of two specific standards of care: 1) the safe application of potholes in determining the depth of subsurface installations in advance of road grading activities, and 2) the amount of hand tool excavation around a subsurface installation one should perform to be confident in finding all the marked installations.¹¹ The Board may also find other types of activities that could benefit from standardization. The Board may wish to create these as broad standards, which may not be suitable for regulation (hence not enforceable), or it may find them to be straightforward in application, which might make them suitable for regulation. This activity is expected to be Board member-led.

Strategic Objective: Establish Stable Funding for Board Operations

The Legislature provided the Board a two-year start-up loan to sustain it until July 1, 2019, when it is expected to have established a funding source. There are two likely sources of funds.

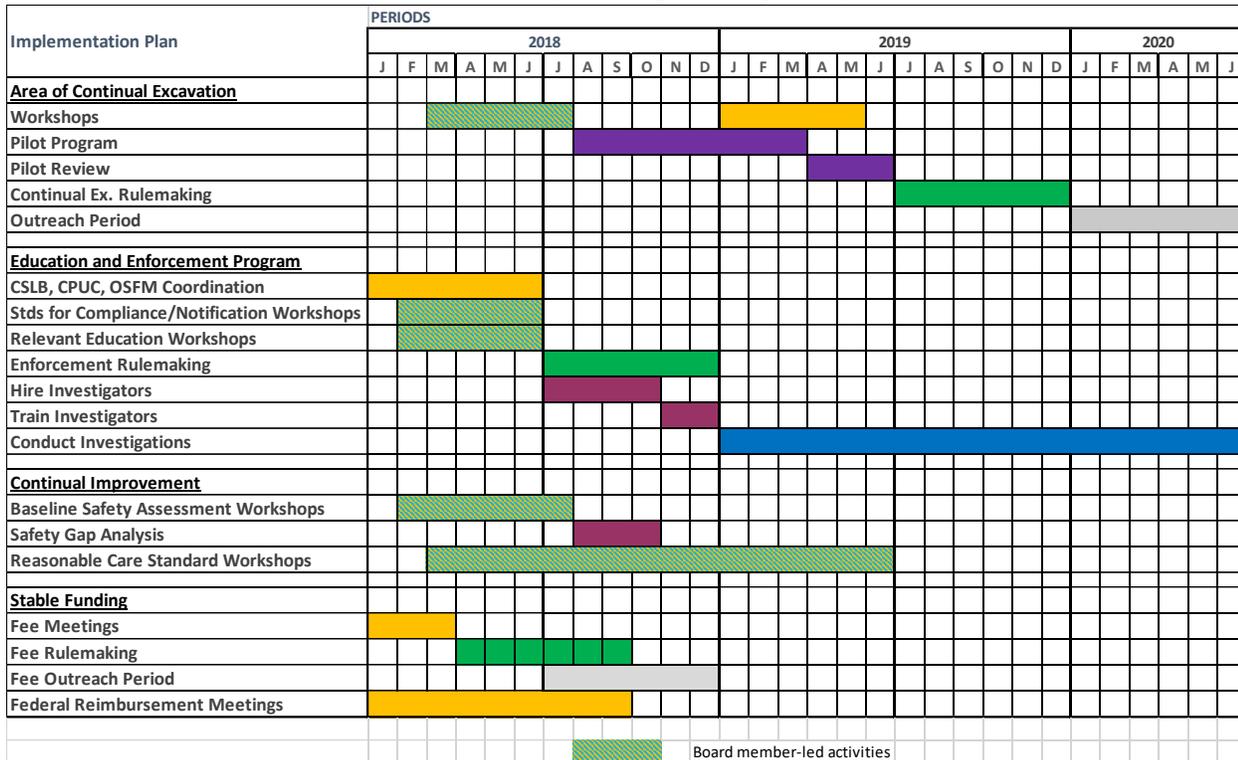
- 1) *Fee levied upon the utility members of the one-call centers*: The Legislature authorized the Board to levy a fee on the underground utility members of the one-call centers using the same methodology as the state's two one-call centers use to fund their operations. Both centers charge member subsurface installation owners a fee per locate request the members receive. This activity is regulatory and is expected to be staff-led.
- 2) *Federal Reimbursement through the State Base Grant*: The federal Department of Transportation reimburses the Public Utilities Commission and Office of the State Fire Marshal for a significant, but variable percentage of their pipeline safety expenses.

¹¹ GOV 4216.18.

Reimbursement for pipeline safety expenses for Board activities might also be possible, but reimbursement is a complicated process and the nature of the Board’s activities—mixing gas and petroleum pipeline safety with safety around other types of installations—might not be possible. Reimbursement, were it granted, would not be available until at least 2020. This activity is non-regulatory and is expected to be staff-led.

Together, these activities can be seen in a chart demonstrating how they support the strategic objectives and Legislative expectations (**Chart 2**). The schedule the Board set for itself in Chart 2 is aggressive but achievable.

Chart 2: 2018 Schedule of activities supporting strategic objectives



During the January 9, 2018 meeting, Board members assigned themselves into pairs to lead workshops and discussions on four of the five Board member-led activities (area of continual excavation, standards for demonstrating compliance/Board notification of incidents, identification of relevant education, and baseline safety assessment) and have begun preparing for workshops to begin in February.

Preliminary 2018 Meeting Schedule

The preliminary schedule for Board meetings and workshops through June is as follows:

January 9th	<i>Sacramento</i>	Business meeting
February 22nd-23rd	<i>Monrovia</i>	Workshops <ul style="list-style-type: none"> • Standards for compliance/Board notification • Identification of relevant education • Baseline safety assessment
March 15th	<i>Salinas</i>	Workshops <ul style="list-style-type: none"> • Area of continual excavation
April 18th-19th	<i>Long Beach</i>	<i>In conjunction with State Fire Marshal Pipeline Safety Conference</i> Business meeting Education and outreach meeting (joint Identification of relevant education /Baseline safety assessment)
May 24th-25th	<i>Sacramento</i>	Workshops <ul style="list-style-type: none"> • Standards for compliance/Board notification • Reasonable care standards
June 21st-22nd	<i>Sacramento</i>	Workshops <ul style="list-style-type: none"> • Identification of relevant education • Area of continual excavation