



California Dig Safe Board

Legislative Review Report

October 18, 2019

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Background and Description of the Board and Regulated Industries

Natural, one might say, is the inclination to look at the world as if it were a stone—static and immovable—and adapt one’s route to its contours. But the world is not immobile, hurtling through its orbit at more than 65,000 miles per hour, its people constantly changing it just as a river eventually cuts through the stone.

Policy, like the river, is an audacious, perhaps arrogant, tool in addressing that which is not currently possible. To practice policy is to see clearly how the world is, decide in one’s mind the way it *should* be, figure out what the world *could* be, and develop a strategy to get there.

The Board’s vision statement betrays this hubris of trying to tell the world what it should be:

The Dig Safe Board seeks to affect a California in which the state’s excavators and subsurface installation owners know and understand:

- *how to identify the locations of subsurface installations*
- *how to protect against dangerous contact with those installations*
- *how to resolve unexpected situations that may arise, and*

in which the state’s excavators and subsurface installation owners exercise that knowledge and understanding to promote a culture of mutual respect and dedication to the belief that everyone goes home safe.

But to see exactly how impossible this vision is, we need to take a step back and take an honest look at the way the world is now. We rely on infrastructure that in many cases was built more than a century ago, though age is no clear proxy for unreliability, as much of the newer installations were placed without an eye for creating effective records, with existing paper records management being downsized

**Aging Infrastructure
and Retiring
Workforce Require
Construction of a
Knowledge
Infrastructure**

and never making the transition to digital,¹ managed in underfunded departments, and dug up by workers among the lowest paid high hazard occupations.²

The oldest systems are often among the best-built. Following the discovery that cholera outbreaks were caused by untreated waste water and a “Great Stink” of human waste that rose from the Thames in a record-breaking August 1858 heat, London built the world’s first great sewer system, running 13,000 miles and using 318 million bricks, and effectively eliminated cholera within its borders.³ London still uses this sewer system today.

Little of the rest of our infrastructure is so well-characterized. According the Transportation Research Board (TRB), reasons for this include:

- Multiple ownership changes have left original records in disarray.
- Drawings reference roads, trees, buildings, and parking lots that are either no longer present or appreciably changed since facility installation
- Abandoned line records are either not kept or not changed to recognize them as abandoned.⁴

And for records created before the widespread use of GPS, there was no way to indicate depth aside from depth of cover, which can change for various reasons.

The problem isn’t merely with old installations. As TRB identifies, “different parties may be responsible for utility depictions for differing phases of the project (for example, planning, design, and construction)” and responsibility may not be well delineated.⁵ Nor is the problem solely isolated on the installation and record creation process. When public agency transportation designers and design consultants were asked what were the greatest contributions to

¹ Jaxon Van Derbeken, “PG&E might have discarded records” *San Francisco Chronicle*, July 22, 2011; Transportation Research Board, National Academies of Sciences, Engineering, and Medicine, *Encouraging Innovation in Locating and Characterizing Underground Utilities*, National Academies Press, 2009, p. 18.

² <https://www.monster.com/career-advice/article/high-paying-dangerous-jobs>

³ Stephen Halliday, *The great Stink of London: Sir Joseph Bazalgette and the Cleansing of the Victorian Metropolis*, Sutton, 1999.

⁴ TRB 2009, p. 18.

⁵ TRB 2009, 15.

inaccurate utility locations, they answered cost, time, and lack of management support.⁶

One need not scratch too deeply below the surface of our infrastructure system to see that the reliability of our infrastructure depends not just on the strength of its construction but the capability of the people who operate and maintain it as well as their relationships with those who work around it. In looking at the challenges of managing our highly-interconnected infrastructure, Paul Schulman and Emery Roe of the University of California at Berkeley Center for Catastrophic Risk Management find that “[c]ommonly proposed solutions to the infrastructure crisis, such as finding new financing mechanisms to generate the trillions needed for new assets, are inherently ill-advised, we argue, when the real organizational and institutional dimensions of the reliability challenge have not been recognized.”⁷ and that the “experience, background, and memory of system operators move center stage in the reliable performance of these large sociotechnical systems.”⁸

Those operators are aging out of the workforce, and their experience, background, and memory is going with them. A 2017 survey by the Center for Energy Workforce Development found that a large wave of the experienced workforce in the electric, natural gas, and nuclear generation industries had retired in the past ten years and that the workforce is now considerably younger.⁹ The construction industry has also faced considerable turnover, in that time, as anticipated by a 2009 study identifying the shifting age demographics of the construction workforce as a significantly greater challenge for its employers than for other sectors of the economy, as manifested in problems transferring knowledge from experienced employees to

⁶ Transportation Research Board, National Academies of Sciences, Engineering, and Medicine, *Encouraging Innovation in Locating and Characterizing Underground Utilities*, National Academies Press, 2009, p. 9.

⁷ Emery Roe and Paul R. Schulman, *Reliability and Risk: The Challenge of Managing Interconnected Infrastructures*, Stanford (2016), p. 9

⁸ *Ibid* p.7.

⁹ Center for Energy Workforce Development, “Gaps in the Energy Workforce Pipeline: 2017 CEWD Survey Results.” <http://cewd.org/documents/surveyreport/2017CEWDSurveySummary-FNL.pdf>

less experienced employees.¹⁰

Given the experience that has already transferred out of the utility and construction workforce, the opportunity window for knowledge transfer is closing. In addition to rebuilding much of the nation's deteriorating physical infrastructure, only a similar effort to rebuild and sustain its knowledge infrastructure will prepare its workforce to manage the mess buried below.

History and function of the Board

Board Creation

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 and an additional twelve investigators for the 2018-19 Fiscal Year.

The Board was created out of a belief by members of the Legislature that the way the state's "call before you dig" law was being enforced—through statutory liability provisions (Gov't Code 4216.7)—was not conducive to maintaining public and employee safety. Federally-mandated public awareness programs conducted by natural gas and petroleum pipeline companies appeared to have only limited effect, as 55% of the state's more than 5,200 natural gas pipeline strikes in 2015 occurred without a "call before you dig" ticket.¹¹ Contractors and utilities pointed the finger at each other, the utilities stating that contractors would rather plow through utilities than spend the time and cost to uncover them and contractors stating that utilities would never take responsibility for their poor locating but would instead invoice contractors for damages regardless of who caused it.

¹⁰ Stephen Sweet, Marcie Pitt-Catsouphes, Elyssa Besen, Shoghik Hovhannisyan, Farooq Pasha, "Talent Pressured and the Aging Workforce: Responsive Action Steps for the Construction Sector," Sloan Center on Aging and Work, 2010, p. 30.

https://www.bc.edu/content/dam/files/research_sites/agingandwork/pdf/publications/TMISR05_Construction.pdf

¹¹ 2015 California Regional Common Ground Alliance Facility Event Report. https://osfm.fire.ca.gov/media/4123/carcga-dirt-report_2015.pdf

In a 2015 hearing before the Assembly Utilities and Commerce Committee, Senator Hill stated that “the worst part about these disputes is how they are resolved—in settlements with non-disclosure agreements where both sides walk away feeling they got the short end of the stick and learning nothing.”

The Legislature’s concerns would be validated in 2015 with fatal natural gas explosions in Fresno and Bakersfield. Governor Brown signed SB 661 on September 29, 2016.

When considering safety, liability is generally considered an effective (if somewhat inefficient) tool to incite good behavior; liability creates the need for insurance, and insurers provide coverage at a level proportional to the perceived effectiveness of an actor’s accident prevention measures. Liability does not, however, facilitate the free exchange of safety information after an accident, as no party to an accident has incentive to volunteer all of the relevant information.

Excavators and operators naturally want clear lines of liability—that one cannot be held responsible for another’s failure to follow the law. In crafting these laws, however, this approach can be counterproductive, especially in an area such as the One Call law, where education and awareness are lacking. One example of where clearly-demarcated lines of liability have failed to provide a safe environment is in traffic control. The Federal Highway Administration has determined that switching traffic lights (with its clear lines of responsibility) at four-way intersections with roundabouts leads to a 78% reduction in severe vehicular crashes,¹² as drivers from all directions must slow down¹³ and pay attention. As researchers Pratelli and Souleyrette state, “when empowered by the green light at a conventional intersection, or when trying to beat the yellow, a driver is much more likely to push his or her limits of attention and ability to avoid pedestrians, bicyclists or other vehicles.”¹⁴

Safety—Not Liability—As Guiding Principle

“The conversation always revolves around liability, and who pays the bill, and that’s what happens rather than the safety.”

Senator Hill, oversight hearing, December 17, 2015

¹² FHWA-SA-17-055. <https://safety.fhwa.dot.gov/provencountermeasures/roundabouts/>

¹³ National Cooperative Highway Research Program. *Report 572: Roundabouts in the United States*, 2007, p. 109. <https://nacto.org/docs/usdg/nchrprpt572.pdf>

¹⁴ A. Pratelli & R. R. Souleyrette, “Visibility, perception and roundabout safety,” *Urban Transport XV* (2009), p. 581. <https://www.witpress.com/Secure/elibrary/papers/UT09/UT09051FU1.pdf>

Several early actions of the Dig Safe Board have been to get excavators to slow down and pay attention. Board regulations on minimum elements of an onsite meeting in an area of continual excavation require farmers and operators to develop and sign a plan for working around high priority subsurface installations, but the regulations do not specify what activities are allowed or how conflicts must be resolved. Proposed regulations on power tool use allow for excavators and operators to agree, in writing, on what power tools may be used in the tolerance zone to find the facilities, but the regulations do not prescribe the outcome of the agreement or put a time limit on discussion. So important was the need for effective communication that the Board debated for hours before deciding on appropriate regulatory language to ensure that excavators and operators provided accurate contact information to the one call centers.

This “traffic circle” approach is designed to make the slogan “damage prevention is a shared responsibility” a reality and not merely a platitude.

Statutory Charge

In the Dig Safe Act of 2016, the Legislature created the Board with four overarching charges:

1. Coordinate education and outreach activities that encourage safe excavation practices
2. Develop standards
3. Investigate possible violations of this article
4. Enforce the one-call law¹⁵

In addition to these general requirements, the Legislature enumerated several specific ones, particularly:

- Agriculture and Flood Control: Develop minimum elements for the onsite meeting and minimum elements for the mutually agreed-upon plan for an area of continual excavation in which a high-priority¹⁶ subsurface installation exists (Gov’t Code § 4216.11)
- Agriculture and Flood Control: Develop through regulation a process by which the renewal

¹⁵ Government Code § 4216.12

¹⁶ “High priority subsurface installation” means natural gas transmission pipelines, petroleum pipelines, pressurized sewage pipelines, high-voltage electric lines (≥60kv), or hazardous materials pipelines that are potentially hazardous to workers or the public if damaged.

requirement for a continual excavation ticket may be modified or eliminated for areas of continual excavation in which no subsurface installations are present (Gov't Code § 4216.10(e))

- Education and Outreach: Annually convene a meeting to understand the existing needs for education and outreach, facilitate discussion on how to coordinate existing education and outreach efforts, and determine the areas in which additional education and outreach efforts may be targeted through grants (Gov't Code § 4216.17(a))
- Standards: Develop a standard or set of standards relevant to safety practices in excavating around subsurface installations and procedures and guidance in encouraging those practices, including 1) evidence necessary to demonstrate legal compliance, 2) what constitutes reasonable care in using hand tools in deep excavations, and 3) what constitutes reasonable care in grading road shoulders and dirt roads (Gov't Code § 4216.18)
- Reporting: Submit a report to the Governor and Legislature annually (Gov't Code § 4216.23)

While not specifically enumerated requirements, the Board determined the following to be foundational and necessary to implement its statutory mission:

- Fees: To fund its operations and repay its startup loan,¹⁷ assess a fee on one-call center members (Gov't Code § 4216.16)
- Education in Lieu of Fines: As the Board's sanctions are to be graduated, and as education was such a significant focus of the Dig Safe Act of 2016, identify or develop an educational requirement to serve as a sanction for violations determined not to merit a financial penalty.

¹⁷ From the Budget Act of 2018 (AB 840): "3540-401— Notwithstanding Provision 1 of Item 8660-012-0470, Budget Act of 2017 (Chs. 14, 22, and 54, Stats. 2017), the \$7,406,000 loan from the California High-Cost Fund-B Administrative Committee Fund to the Safe Energy Infrastructure and Excavation Fund shall be repaid no later than July 1, 2021, upon the order of the Department of Finance."

- Accident Notification: To investigate accidents, Board investigators would need to be notified of their existence (Gov't Code § 4216.19)
- Administrative Hearings: To offer persons found to have violated the One Call Law opportunity to be heard before the Board decides to assess or recommend a penalty, a hearing process would need to be developed in regulations (Gov't Code §§ 4216.6, 4216.19)

In addition to the above requirements codified in the Dig Safe Act of 2016, bills in 2018 and 2019 expanded the Board's charge:

- AB 1914 (Flora, 2018): Determine through regulation what types of power tools may be used around buried facilities prior to determining their exact location using hand tools (Gov't Code § 4216.4(a)(2)(C))
- AB 1166 (Levine, 2019): Develop through emergency regulations a process by which a utility operator may request an extension to the January 1, 2021 operative date requirement to submit a response to an excavator via electronic positive response (Gov't Code § 4216.3(d)).

Startup Activities

In addition to the Board's significant statutory responsibilities, the Board and its staff has and continues to undertake several initiatives to establish the Board's administrative foundation. Several are included here.

- CAL FIRE/Office of the State Fire Marshal support

Given the Board's small size, it would have been infeasible for it to function as a stand-alone state agency. CAL FIRE support has allowed the Board to take advantage of centralized human resources, accounting, and information technology services and not have to apply for delegated authority to CalHR, the Department of General Services (DGS), and the Department of Technology.

- Loan Repayment Extension

When the Dig Safe Board was funded in the 2017-18 Budget Act, the first two years of its operations were covered by a \$7,406,000 loan from the High-Cost Fund B (funded by a surcharge levied on communications providers). The loan was to be repaid, however, the on first day of the Board's third year of operations—July 1, 2019. Staff recognized in fall of 2017 that the Board would not be able to institute a fee regulation until January 2019, leaving only six months to collect enough revenue to repay the loan, support fiscal year 2019-20 operations, and create a reasonable reserve.

A fee levied on one-call center members to cover all these costs would be massive, so staff worked with the Department of Finance to propose a Budget Change Proposal (BCP) to request an extension to loan repayment until July 1, 2021. The Legislature agreed with the change and adopted it in the 2018-19 Budget Act.

➤ Investigation commencement date

Also discovered in the second half of 2017 was a provision of the Dig Safe Act of 2016 that appeared to restrict the Board from conducting investigations until July 1, 2020. SB 661 was drafted to prohibit the Board from enforcing the One Call Law until July 1, 2020, when the new, year-long area of continual excavation tickets would be available. Gov't Code § 4216.19, which contained enforcement provisions, was made operative by its own provisions on July 1, 2020.

Government Code § 4216.19 also contained a provision that allowed the Board to investigate accidents, and the July 1, 2020 operative date appeared to prohibit the Board from conducting investigations until then. While the Board would have no expectation to enforce the law against violators under its own jurisdiction until mid-2020, such enforcement cases were expected to represent only approximately 5% of all the cases brought before the Board—the others would be decisions on whether to recommend enforcement action to the Contractors State License Board, the Public Utilities Commission, the Office of the State Fire Marshal, and local

governing boards, all of whom had authority to enforce the One Call Law.

To allow the Board to begin investigating accidents as soon as it had the staff to do so, the Governor proposed trailer bill language that would be accepted by the Legislature in AB 92.

➤ Southern California office space

The Board's foundational BCP (3540-240-BCP-2017-GB) anticipated that the Board would have investigators housed in three branch offices in Northern, Central, and Southern California, each staffed with three Special Investigators supervised by one Supervising Special Investigator 1. Analysis of 2015 county-level damage data,¹⁸ however, indicated that only 15% of the state's gas pipeline damages occurred in the Central Valley, meriting less than two of the twelve staff. While having investigators stationed remotely is a reasonable approach for a mature program, the need to provide support and develop a culture was incompatible with maintaining sparsely-populated disparate offices, and the decision was made to maintain only two offices—one in Sacramento and another in the Los Angeles region—with four (three staff and one supervisor) stationed in the North and eight (five staff, two supervisors, and the chief) stationed in the South.

To acquire a lease for a Southern California office, staff engaged with DGS in September of 2017. Seeing that the Board would not be able to execute a contract before the end of the 2017-18 fiscal year, staff engaged with DGS to move approximately \$550,000 into the state's Architectural Revolving Fund to pay for tenant improvements when the lease was finally executed. Staff does not anticipate moving into a new building before fall of 2020.

In the meantime, Southern California investigators were graciously hosted by the Contractors State License Board in their office space in Norwalk. On June 3, 2019, Southern California investigators moved into an office space in Lakewood previously

¹⁸ 2015 California Regional Common Ground Alliance Facility Event Report.

occupied by the Office of the State Fire Marshal's Pipeline Safety Division as a temporary location until DGS procures a lease.

➤ Investigator vehicles

In authorizing positions for investigators, the Board's foundational BCP also provided them 13 vehicles, which were requested through CAL FIRE's vehicle acquisition process in fall 2017 and arrived and were made available in Spring 2019. Given that the majority of damages occur in urban areas, the Board acquired eight Ford Fusion plug-in hybrid sedans, supplementing them with five all-wheel drive Ford Explorers for investigations requiring vehicles that could operate off road.

➤ Website

In December of 2017 the Board's website became operational. As the Board is a separate authority from CAL FIRE, CAL FIRE's IT team requested from the Government Operations Agency (GovOps) the separate subdomain of "digsafe.ca.gov". GovOps had recently passed a rule, however, that required all internet domain names to be the name of the organization, an acronym, or a recognizable derivative. This rule did not apply to existing agencies. The name "digsafe" was determined not to satisfy the criteria. Rather than choose a website subdomain with an acronym or other rearrangement of the unwieldy "California Underground Facilities Safe Excavation Board," Board staff chose to remain under the "fire.ca.gov" subdomain until it is able to demonstrate that "digsafe.ca.gov" is a recognizable derivative of the Board's official name.

➤ Investigations case management system

To manage efficiently the volume of investigations, respond timely to Public Records Act inquiries, and to report data and statistics for business and oversight use, Board staff, with the assistance of CAL FIRE's information technology staff, engaged in contracting for an investigations case management system in late summer 2018. Staff contracted with MERP systems in June and is in the discovery phase of system development.

➤ Memoranda of Understanding

As the Board will be referring investigations to the Contractors State License Board, Public Utilities Commission, and Office of the State Fire Marshal, and Board investigators will be engaging with investigators from those state agencies on investigations, the Board engaged in developing Memoranda of Understanding with them to promote the sharing of investigation information.

The Board approved Memoranda of Understanding with the Public Utilities Commission and Contractors State License Board in October and November 2018, respectively. As the Board and the Office of the State Fire Marshal are organizationally more closely-associated, staff of both organizations have not yet determined what is appropriate to include in a memorandum of understanding.

➤ Education and Outreach Officer

The Board's foundational BCP anticipated that two Associate Governmental Program Analysts (AGPAs)—a classification of analyst undertaking journey-level analysis—would “plan and prepare Board meeting materials, assist in the creating of regulation packages, respond to Board appointment issues and issues raised by Board members, and assist with public outreach.”

As one of the Board's four legislative charges was to coordinate the state's education and outreach activities, the magnitude of education and outreach work was determined early to require more focus than the Board's initial staff allocation allowed. Board staff decided to reclassify one of the nine Special Investigators to an Information Officer 1 (Specialist) with the working title “Education and Outreach Officer.” The Board hired its Education and Outreach Officer shortly after the position was authorized in August 2018.

➤ Meeting locations

Statute requires the Board to meet quarterly in Northern and Southern California.¹⁹ In its first calendar year, the Board met nine times in eight different locations in six different cities. While the Board continues its commitment to make itself accessible by meeting throughout the state, the time required to secure and prepare to meet in unfamiliar venues has been significant. The meeting locations stabilized in 2019, and Board staff made several purchases to standardize the effort of conducting meetings, including procuring microphones, a USB-based microphone switching system, and its own GoToMeeting account. To continue the Board's accessibility, staff is investigating the use of video equipment and closed-captioning services.

➤ Fee management

The Board decided that, in creating a regulatory fee using the one-call centers' existing billing infrastructures, that it would not require the one-call centers to act as collection agencies or otherwise make them responsible for paying the Board's regulatory fee on behalf of members who didn't pay their bills. As such the Board needs to have an accounting infrastructure capable of interacting with the one-call centers billing and collection information, tracking those members who haven't paid, and sending notices to those delinquent members. The Board is continuing to work with CAL FIRE's accounting office to facilitate this process.

➤ State Leadership Accountability Act compliance

The State Leadership Accountability Act²⁰ (SLAA) was created to ensure that state agencies had sufficient internal controls to manage their statutory compliance obligations in areas such as purchasing and HR, their reporting requirements, and their efficiency of operations.

SLAA compliance is owned at the department (CAL FIRE) level, but responsibility for developing effective internal controls is spread across leadership in each program unit. Following guidance from the

¹⁹ Gov't Code § 4216.15

²⁰ Gov't Code §§ 13400-13407.

Department of Finance, Board staff is using the federal Government Accountability Office's *Standards for Internal Control in the Federal Government* to develop internal controls. The first step in doing so is to identify, develop, and document all of the Board's processes—an exercise which will continue into the foreseeable future, as Board functions continue to be implemented.

Building the Foundation: Board Approach to Strategic Planning

To maintain the trust and confidence of the Legislature and the people of California, state governmental agencies like the Dig Safe Board must adhere to statutory and administrative law, but should also develop program-specific methods to track, report, and improve agency performance.

Government Performance and Results Act

One framework for doing so is the federal Government Performance and Results Act (GPRA), passed in 1993 and amended in 2010, which outlines the basic strategic planning requirements for federal agencies.²¹ In preparing the law for adoption, a congressional conference report highlighted Congress's view on its need: "At present, congressional policymaking, spending decisions, and oversight are all seriously handicapped by the lack both of sufficiently precise program goals and of adequate program performance information. Federal managers, too, are greatly disadvantaged in their own efforts to improve program efficiency and effectiveness by that same lack of clear goals and information on results."²²

In general, GPRA requires federal agencies to develop strategic plans every four years, coordinated with the presidential elections, and performance plans annually. The strategic plans outline high-level strategic objectives, while the annual performance plans describe the activities that agencies will undertake in advancing toward those objectives. Objectives may be mission-focused, contributing directly to an agency's strategic goals, or management focused, building the capabilities (human capital, information technology, financial stewardship, etc.) upon which the agency can meet strategic goals.

²¹ Part 6 of the Office of Management and Budget's OMB Circular A-11 sets the specific requirement for agencies and offers guidance.

²² Report 103-58, Government Performance and Results Act of 1993, to Accompany S. 20. Senate Committee on Governmental Affairs, June 16, 1993. <https://obamawhitehouse.archives.gov/omb/mgmtgpra/gprptm>

While the GPRA strategic planning framework creates transparency in goal-setting and performance, it is too broad a tool to specify the processes for continual improvement of safety. To fill this void, administrative units within the Department of Transportation— the FAA in particular—have adopted and continue to develop elements of a safety management system approach to regulatory oversight. The safety management system approach—as envisioned by the FAA and International Civil Aviation Organization (ICAO)—focuses on safety policy development, safety culture promotion, and a process for safety management and continual improvement.

Safety Management Systems

The Board’s first action in its inaugural January 2018 meeting was to adopt policies, including mission, vision, and values statements.

Mission, Vision, and Values

Policies that express the image an organization has of itself can rally internal stakeholders around goals the organization sets for itself and sets expectations of external stakeholders in their interaction with the organization. Such statements play a fundamental role in the creation of direction and can be particularly powerful in a new organization, such as the Dig Safe Board, which has little historical baggage to create inertia against change.

Mission, vision, and values statements have a special purpose in strategic planning. Often implicit in strategic planning is the need for a change in direction, and mission, vision, and values statements can provide the many employees responsible for making changes (and convincing others to go along with those changes) a commonly-understood direction unified across the organization.

Politics is, so the truism goes, the art of the possible. The limitation of what is possible is implicitly time-bound—what is possible tomorrow may not be possible today, and the usefulness of politics in advancing future possibilities is similarly restricted.

Policy, on the other hand, is a much more audacious, perhaps arrogant, but nonetheless effective tool in addressing that which is not currently possible. To practice policy is to see clearly how the world is, decide in one’s mind

the way it *should* be, figure out what the world *could* be, and develop a strategy to get there.

The Board's vision statement betrays this hubris of trying to tell the world what it should be

Values play an important role in organizations with a safety mission. A safety-focused organization must develop safety management processes, but such an organization must also develop a culture conducive to the promotion of safety. A poor safety culture can impede effective hazard reporting, collaborative root-cause analysis, and the development of risk mitigations. Conversely, the International Civil Aviation Organization (ICAO) attributes much of civil aviation's outstanding safety record to a continuous learning process based on the development and free exchange of safety information.²³

This free exchange cannot, however, be viewed as selective, especially if it is selective against the general public. As Peter Sandman explains, the traditional view of the public from an industry point of view had been "Ignore people if you can, mislead them if you must, lie to them in extremis, but for heaven's sake don't level with them because they will screw it up."²⁴

The Board's expression of such values of openness can signal to stakeholders that it is not solely the Board's responsibility to act consistent with these values, but that an idea a stakeholder provides that is unnecessarily inaccessible may not receive the weight of argument it might otherwise achieve were it understandable to other stakeholders and thus subject to the crucible of public debate.

²³ Doc 9859, "Safety Management Manual," ICAO, Third Edition, 2013, 4-App 5-1

²⁴ Peter Sandman, *Responding to Community Outrage: Strategies for Effective Risk Communication*. American Industrial Hygiene Association, 1993, p. 4.

Mission (Policy B-02):

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.

Vision (Policy B-03):

The California Underground Facilities Safe Excavation Board seeks to effect a California in which the state's excavators and subsurface installation owners know and understand

- how to identify the locations of subsurface installations,
- how to protect against dangerous contact with those installations, and
- how to resolve unexpected situations that may arise, and

in which the state's excavators and subsurface installation owners exercise that knowledge and understanding to promote a culture of mutual respect and dedication to the cause that everyone goes home safe.

Values (Policy B-04):

The actions and decisions of the Underground Facilities Safe Excavation Board members and staff will be guided and informed by their commitments to:

- Respect for and attentiveness to the expression of differing backgrounds and perspectives of the Board's members, the public, and stakeholders, as well as for the missions of excavators, operators of subsurface installations, and other federal, state, and local agencies.
- A culture of continuous learning based on the development and free exchange of safety information.
- Inquiry into the facts of and context behind accidents, near misses, and latent safety-related conditions in the field.
- Accessibility to the public and stakeholders, within the bounds of the law, constitutional principles of due process, and ethical conduct.
- Integrity in serving in the public interest and devotion to maintaining the public's trust.

Annual Plans: The Board’s Fundamental Planning Unit

Under GPRA, annual plans are created to implement strategic plans. Dig Safe Board members, however, chose to forego a strategic plan for the first two years of operation to develop an informed understanding of what directions they would like to take the Board. They had little discretion in the first two years, anyway, as the Legislature laid the Board’s tasks out clearly, leaving little room for pursuing other avenues.

The 2018 and 2019 Annual Plans each had four strategic objectives, and each objective had one or more strategic activities outlines to meet the objective. The 2018 and 2019 Plans had the following strategic objectives and activities:

Table 1: Strategic Objectives and Activities 2018	
Area of Continual Excavation	Develop procedures through regulation for an annual ticket process for agricultural and flood control operations that facilitates effective communication between subsurface installation owner and excavator and minimizes or eliminates the impact to operations on land where no subsurface installations exist.
<i>Strategic Activities</i>	<ul style="list-style-type: none"> • Outreach and Piloting
Develop Education and Enforcement Program	Develop an education and enforcement program that allows Board staff to investigate accidents and the Board to enforce safe excavation laws through direction to relevant education and citations.
<i>Strategic Activities</i>	<ul style="list-style-type: none"> • Identification of Relevant Education • Standards for Demonstrating Compliance • Board Notification of Incidents • Inter-Agency Enforcement Coordination
Continual Learning	Develop a framework for continual improvement through the analysis of data, accidents, and other information, through standard development, and through the adoption of periodic review processes.
<i>Strategic Activities</i>	<ul style="list-style-type: none"> • Baseline Safety Assessment • Reasonable Care Standards
Stable Funding	Develop through regulation a stable funding source by levying a fee on members of the one call centers and explore options for federal funding. Below are the strategic activities proposed for the Board and Board staff to undertake in 2018. The activities are organized under the four strategic objectives
<i>Strategic Activities</i>	<ul style="list-style-type: none"> • Fee Levied upon the Members of the One-Call Centers • Federal Reimbursement through the State Base Grant Administrative

Table 2: Strategic Objectives and Activities 2019	
Create an Area of Continual Excavation Process	Create and approve regulations for an annual ticket process for everyday farming activities and flood control operations that facilitates effective communication between operators and excavators, and minimizes the impact to farming operations on land where no subsurface installations exist.
<i>Strategic Activities</i>	<ul style="list-style-type: none"> • Create Minimum Standards for Onsite Meetings • Modify or Eliminate the Renewal Requirement for Areas of Continual Excavation Without Buried Infrastructure
Develop an Education and Enforcement Program	Create and approve regulations for an enforcement program that allows Board staff to investigate accidents and the Board to enforce safe excavation laws through direction to relevant education and citations, including a Board-created educational course.
<i>Strategic Activities</i>	<ul style="list-style-type: none"> • Create an Education in-Lieu of Fines Course • Develop Standards for Demonstrating Compliance • Board Notifications of Incidents • Further Develop Investigations and Enforcement Rulemakings • Continue Building the Investigations Division • Investigations Division Startup Support
Develop Processes for Continual Learning	Use data, accidents, and other information to develop a framework for continual learning through the development of regulations, standards, and the adoption of a periodic review process.
<i>Strategic Activities</i>	<ul style="list-style-type: none"> • Tool Development for Assessments • Reasonable Care Standards • Power Tool Use in the Tolerance Zone
Establish a Foundation for Board Operations	Develop internal and external policies to continue to establish a well-functioning government organization that promotes safe excavation throughout the state.
<i>Strategic Activities</i>	<ul style="list-style-type: none"> • Administrative Division Startup Support • Education and Outreach

The Board’s 2018 and 2019 Plans are listed as attachments to this report.

To bridge the 2018 and 2019 Plans, Board staff wrote a 55-page 2018 Results Report. As the report catalogs the Board’s first year in existence, the report focuses more on outputs than on outcomes. As the Board develops its analytical toolset, and as time passes and the results of Board action are more clearly visible, the Results Report is expected to

have a greater focus on the effect of Board action. The 2018 Results Report is listed as an attachment. The 2019 Results Report is currently in development.

While there was no strategic plan in place in 2018 and 2019, the strategic objectives and strategic activities were designed with the idea that they would be compatible with a strategic plan once such a plan was developed.

Strategic Plan

In the fall of 2019, the Board began to develop its strategic plan. While the work is ongoing, the Board has concurred preliminarily on the following four strategic directions:

1. Improve Compliance by Reaching Parties in Effective Ways

The state's one-call law forms the bedrock of the state's relevant safety policy, and is characterized by the requirements for excavators to notify the one-call center before beginning work, for operators to accurately locate their buried infrastructure, and for excavators and operators to communicate and use reasonable care to maintain safe operations in the vicinity of that infrastructure. The experience of Board members and investigative staff supports the assertion that much of the law's non-compliances are the result of a lack of understanding of the law's requirements and the risks associated with ignoring it. Ignorance is not, however, the only reason for unsafe practices, and effective outreach to knowledgeable non-compliant actors will need to involve enforcement.

2. Improve Accessibility of Buried Infrastructure Location Knowledge and Understanding

An operator's access to accurate information can be hampered by a multitude of ownership changes have left original records in disarray, the original drawings being referenced to roads, trees, buildings, and parking lots that are either no longer present or appreciably changed since facility installation, and abandoned line records that are either not kept or not changed to recognize the lines as abandoned. Different parties may be responsible for managing buried infrastructure in differing phases of a project, and the lack of consideration for buried infrastructure in the engineering phase may place excavator and operator in conflict that could have been avoided. The transmission of available information may

benefit from improvement—something that the proposed AB 1166 intends to address. Additionally, the techniques used by excavators and operators alike— such as potholing—may need further standardization for a practitioner to know the extent to which he or she has taken reasonable care in determining the locations of buried lines.

3. Identify proximate and contributing causes to safety accidents and non-compliances

The Legislature provided the Board with investigative staff and vehicles for them to use in the expectation that they would investigate accidents to determine their causes. The author of the Board's founding legislation stated in a legislative hearing that one of the great problems of the time was that conflicts over safety issues were resolved by claims departments in settlements with non-disclosure agreements with both sides feeling they got the short side of the stick and the industry learning nothing, leaving the situation to repeat.

4. Build Board operations to achieve compliance, reporting, and operational excellence in a resource-efficient manner

The State Leadership Accountability Act requires agencies to have effective internal controls to manage their operations, reporting, and compliance obligations. Given the Board's breadth of different functions (e.g. education, regulations, investigations, enforcement), the Board has a list of operations, reporting, and compliance requirements rare in state government for such a small staff to manage—a point exacerbated by the fact that it is still building its operational capabilities.

Following GPRA model, the strategic plan is no "plan" at all, but an overarching set of directions by which the annual plans—the true planning documents—are developed.

Annual plans articulate specific objectives of the Board, which include how the objective is planned to be achieved and who is responsible for undertaking it. Objectives are not subordinate to strategic directions—that is they are not under any one strategic direction in an organizational hierarchy—but they will instead advance one or, often, more than one strategic direction. Annual results reports will articulate the outputs and outcomes of the previous year's annual plan and are inextricably linked to the development

of the subsequent year's annual plan. Board staff propose that the strategic plan be effective for three years.

Board Membership and Committees

The Board is composed of nine members, seven of whom are appointed by the Governor and one each is appointed by the Speaker of the Assembly and the Senate Rules Committee. Member Randy Charland was appointed by the Senate Rules Committee on September 19, 2017 by the Senate Rules Committee, followed on December 18, 2019 by the Governor's seven appointees. Three weeks later the Board held its first meeting in Sacramento.

Members



Jessica Arden

Member Arden is from Woodland Hills. She has been city engineer for the City of Westlake Village since 2017 and was deputy city engineer from 2016 to 2017, serving in these positions on contract with Willdan Engineering. Arden served in several positions for the City of Santa Monica from 2009 to 2016, including water resources engineer and associate engineer. She was a senior design engineer at Willdan Engineering from 2005 to 2008. Arden served as Board Chair in 2018, and was voted Vice Chair by the Board on February 11, 2019.

Vince Bernacchi

Member Bernacchi is from Davis. He has been president at Schetter Electric Inc. since 2006, where he has held several positions since 1976, including vice president, project manager, estimator, foreman electrician, journeyman electrician, and apprentice electrician. Bernacchi retired from the Board after his first term came to an end in December 2018. His position has not yet been filled.



Ron Bianchini

Member Bianchini is from Livermore. He has been chief operations officer at Preston Pipelines Inc. since 2011, where he was area manager from 2009 to 2011. Bianchini was president and chief executive officer at Delta Excavating Inc. from 1989 to 2009, vice president at Tri Valley Excavation Inc. from 1986 to 1989 and co-founder at B&P Excavating Inc. from 1979 to 1985.



Randy Charland

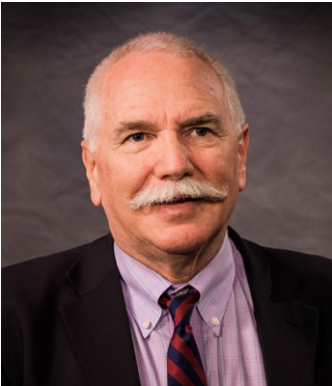
Member Charland is from Camarillo. He has been the Director of Risk Management-California for UtiliQuest, LLC, since 2003 where he has held several positions for the past 27 years, back when the company was known as Underground Technology, Inc. (UTI), including Underground Utility Locator, Field Supervisor, Branch Manager, District Manager, and Manager of Operations Support.





Marjorie Del Toro

Member Del Toro is from Foothill Ranch. She is the President and CEO of ehs International, Inc., a nationally recognized company specializing in environmental health and safety education. Since 1997, Del Toro and her staff have created innovative safety education that brings an understanding of today's multi-generational workforce and growing technological advances to the construction industry.



Bill Johns

Member Johns is from Huntington Beach. He has been the vice president at Utility Coordinating Inc. since 2014. Before that, Johns served as principal project manager at SPEC Services Inc. from 1990 to 2014, vice president of the Civil Department at International Consulting Engineers from 1988 to 1989 and a terminal engineer at Kinder Morgan in 1987. Johns was a public works engineer for the U.S. Navy from 1985 to 1987 and was a construction field engineer from 1980 to 1985 at Healy Tibbitts and Dillingham Construction.



Marshall Johnson

Member Johnson is from Inglewood. He has been area manager of network process, quality compliance and damage prevention at AT&T since 2000. Prior to that, Johnson held several positions at Pacific Bell from 1979 to 2000, including area sales manager, area development manager, marketing center manager, revenue advisor and account executive.

Amparo Munoz

Member Munoz is from Fontana. She currently works as a Maintenance Planner at Steelscape. Before that, Munoz worked as an Asset Manager for the City of Rialto, and a Maintenance Planner for Gilead Sciences and Aspect Solutions USA. She received her Bachelor of Science Degree in Biology at California State University at Los Angeles.



Carl Voss

Member Voss is from Bakersfield. He has been land manager at Grimmway Enterprises Inc. since 1995. Prior to that, Voss served as a grower relations representative at Mike Yurosek and Son Inc. from 1989 to 1995 and assistant plant manager at Dole Fresh Fruit Company from 1986 to 1988. Voss was voted Chair by the Board on February 11, 2019.



Member Attendance

Statute requires the Board to meet quarterly in Northern and Southern California.²⁵ Given the Board’s heavy workload, it met nine times in 2018 and will meet 10 times in 2019. The Board expects to meet on a similar frequency for the foreseeable future, given a continued regulatory workload and the beginning of enforcement hearings in early 2020.

Meeting Type	Location	Date	Arden	Bernacchi	Bianchini	Charland	Del Toro	Johns	Johnson	Munoz	Voss
Board Meeting	Sacramento, CA	January 9, 2018	Y	Y	Y	Y	Y	Y	Y	Y	Y
Board Meeting	Monrovia, CA	February 22, 2018	Y	Y	Y	Y	Y	Y	Y	Y	Y
Education and Outreach	Long Beach, CA	April 19, 2018	Y	Y	Y	Y	Y	Y	Y	Y	Y
Board Meeting	Sacramento, CA	June 21, 2018	Y	Y	Y	Y	Y	Y	Y	Y	Y
Board Meeting	Bakersfield, CA	July 24, 2018	Y	Y	Y	Y	Y	Y	N	Y	Y
Board Meeting	Westlake Village, CA	August 20, 2018	Y	N	N	Y	Y	Y	Y	Y	Y
Board Meeting	Sacramento, CA	October 15, 2018	N	Y	Y	Y	Y	Y	Y	N	Y
Board Meeting	Fontana, CA	November 8, 2018	N	Y	Y	Y	Y	Y	N	Y	Y
Board Meeting	Sacramento, CA	December 10, 2018	N	Y	Y	Y	Y	Y	N	Y	Y
Board Meeting	Sacramento, CA	January 14, 2019	N		Y	Y	Y	Y	Y	Y	Y
Board Meeting	Sacramento, CA	February 11, 2019	Y		Y	Y	Y	Y	Y	Y	Y
Board Meeting	Corona, CA	April 15, 2019	Y		Y	Y	Y	Y	Y	Y	Y
Board Meeting	San Francisco, CA	May 13, 2019	Y		Y	Y	N	Y	Y	Y	Y
Board Meeting	Sacramento, CA	June 10, 2019	Y		Y	Y	Y	Y	Y	Y	Y
Board Meeting	Sacramento, CA	July 15, 2019	Y		Y	Y	Y	Y	Y	Y	Y
Board Meeting	Long Beach, CA	August 12, 2019	Y		Y	Y	Y	Y	N	Y	Y
Board Meeting	Los Angeles, CA	September 9, 2019	Y		Y	Y	Y	Y	Y	Y	Y
Education and Outreach	Los Angeles, CA	September 10, 2019	Y		N	Y	Y	Y	Y	Y	Y
Board Meeting	Sacramento, CA	October 7, 2019	Y		Y	Y	Y	Y	Y	N	Y

Thus far, the Board has yet to have its schedule impacted by lack of a quorum.

²⁵ Gov't Code § 4216.15

Committees

The Dig Safe Board committees derive from strategic activities identified in its annual plans. If Board member presence is required for an activity not identified in an annual plan, the Board or the Executive Officer will identify members to form an *ad hoc* committee. The Board's experience has shown that *ad hoc* committees in one year can become standing committees in another year, as was the case when Members Bianchini and Johnson conferred on legislation to allow power tool use in the tolerance zone (AB 1914) in 2018 and implemented the new law in 2019.

Committees consist of Board member pairs, sometimes known as "Bagley-Keene partnerships," who can discuss an issue between themselves and with staff before bringing recommended direction to the Board in public meetings.

Table 4. Board Committees			
Committee	Type	Members	Years
Area of Continual Excavation	Standing	Johns & Voss	2018 & 2019
The Area of Continual Excavation ("ACE") committee is another multi-year standing committee and is powered by members Johns and Voss. This topic is derived from the 2016 Dig Safe Act that created the Board, as the legislature recognized that existing law was not well suited to agricultural and flood control excavation activities. This committee has charge of developing procedures through regulation for an annual ticket process that facilitates communication between subsurface installation owner and excavator while minimizing or eliminating the impact to operations on land where no subsurface installations exist			
Education in Lieu of Fines	Standing	Del Toro & Johnson	2018 & 2019
The committee on Education in Lieu of Fines is composed of members Del Toro and Johnson, and was driven by them from 2018 through to the present. The Dig Safe Board's enforcement philosophy is that, where instances of non-compliance are not evidenced as willful or reckless, educational actions will be the most effective means of improving safety practices. This committee has charge of developing the Board's educational courses and non-punitive enforcement activities that will follow the actions of the Board's investigative branch.			
Investigations and Reporting	Standing	Bernacchi & Charland	2018
		Arden & Charland	2019
The Investigations and Reporting committee is a standing committee continuously led by member Charland and joined by member Bernacchi in year one of the Board and member Arden in year two. This committee exists to address the status of and issues involved with voluntary reporting processes to state authorities such as the Dig Safe Board that lead to dramatically fewer investigations of safety-centered practices and a lack of data on excavation damages in general.			
Baseline Safety Assessment	Standing	Arden & Bianchini	2018
In 2018 the Board undertook a baseline safety assessment to understand the means of evaluating safety outcomes as well as to establish tools for assessing the impact of the Dig Safe Board on the state of safety culture and infrastructural practices in California. The Baseline Safety Assessment Committee was led by Board members Arden and Bianchini and introduced a toolset of analytical approaches to program evaluation that continue to be developed by the Board.			

Table 5. Board Committees			
Committee	Type	Members	Years
Reasonable Care Standards	Standing	Bianchini & Munoz	2018 & 2019
The Reasonable Care Standards committee is charged with the development of standards of care in excavation practices such that one can be confident in proceeding within safety guidelines. This committee run by members Bianchini and Munoz initially was charged with two specific standards of care over potholing to determine the depth of subsurface installations as well as in hand tool excavation around subsurface facilities, however the Board may find other types of activities that could benefit from standardization.			
AB 1914	Ad Hoc	Bianchini & Johnson	2018 & 2019
The AB 1914 Committee is led by members Bianchini and Johnson to discuss this legislation over power tool use in the tolerance zone of a facility marking.			
AB 1166	Ad Hoc	Charland & Munoz	2019
The AB 1166 Committee is led by members Charland and Munoz to discuss this legislation over electronic positive response between excavators and operators through the regional one-call centers.			

Regulatory Activity

Since the Board began meeting at the beginning of 2018, it has continually been engaged with multiple concurrent rulemaking packages.

Package 1 – Fee Regulations

Board Authorization of Rulemaking Proceedings	Board Approval of Regulations	Operative Date
April 19, 2018	August 20, 2018	January 1, 2019

The Legislature authorized the Board to levy a fee on the members of the one call centers using the same method the one call centers use to fund their operations. Both USA North 811 and DigAlert charge member subsurface installation owners a fee based on the volume of locate requests the members receive.

In the Board's April 2018 meeting, staff proposed draft language to establish the fee and determine the amount operators would have to pay, including the formula proposed to be used to calculate each of the one-call center member's fee amount. The Board voted to approve the proposed text and authorized rulemaking proceedings.

Package 2 – Area of Continual Excavation Minimum Elements for Onsite Meetings, Investigations & Enforcement, and Incident Notification Regulations

Board Authorization of Rulemaking Proceedings	Board Approval of Regulations	Operative Date
February 11, 2019	July 15, 2019	January 1, 2020 (expected)

The Board was required to develop regulations outlining minimum standards for what needs to be discussed in an onsite meeting triggered in relation to an area of continual excavation (ACE) ticket. Additionally, to begin enforcement proceedings, the Board needed to create regulations that define its authority to investigate dig-in accidents and collect evidence, outline the sanctions the Board can levy against any party found in violation of the Dig Safe Act, and establish a reporting process through which the Board can learn about damages in a timely manner.

From July to October 2018, Board members and staff conducted outreach and workshopping activities with farmers to inform and support development of regulations governing onsite meeting requirements. Draft regulation language was presented at the December 2019 Board meeting for discussion among members and stakeholders and was further refined through public discussion at the Board’s January, 2019, meeting. In February, the Board voted to adopt regulation language and authorize rulemaking proceedings.

Package 3 – Power Tool Use Regulations (AB 1914) and ACE Ticket Renewal

Board Authorization of Rulemaking Proceedings	Board Approval of Regulations	Operative Date
July 15, 2019	January 2020 (expected)	July 1, 2020 (expected)

In addition to creating minimum standards for on-site meetings, the legislature also tasked the Board with creating regulations that minimize or eliminate the impact of an annual ticket process to farm operations on land where no subsurface installations exist. This regulatory activity was combined with responding to requirements imposed by AB 1914. Signed into law on September 23, 2018, AB 1914 (Flora) amended Section 4216.4 of the Government Code to allow for the use of power-operated or boring equipment within the tolerance zone prior to determining the exact location of subsurface installations. The Legislature specified that the Board adopt regulations to implement this change on or before July 1, 2020.

From February to April 2019, staff conducted research and stakeholder outreach, including a standalone public workshop, the results of which were discussed among the Board and stakeholders at its regular meetings. In May, staff presented draft proposed regulation language to the Board. The language was discussed and refined at that meeting and at the June meeting. In July, the Board voted to adopt proposed regulation language and authorize rulemaking proceedings.

Package 4 – Electronic Positive Response Implementation Extension (AB 1166) – EMERGENCY REGULATIONS

Board Authorization of Rulemaking Proceedings	Board Approval of Regulations	Operative Date
January 13, 2020 (proposed)	February 10 2020 (proposed)	March 2020 (proposed)

Signed into law on October 2, 2019, AB 1166 (Levine) required subsurface installation operators to submit their response to an excavation ticket electronically to the one-call center by January 1, 2021. As this is expected to require many operators to make technological and operational changes, the Legislature authorized the Board to grant limited extensions to the compliance requirement of up to one year for good cause.

Given the long regulation timeline, the Legislature authorized the Board to develop an application process through emergency regulations to allow for a process to be in place in time for operators to avail themselves of it. The Board expects to begin discussing draft regulations at its December meeting and hopes to vote to approve the public comment process in January.

The Board conducted one significant study in its regulation development activities related to the number of expected excavation tickets for California agriculture given full legal compliance and excavation ticket volume in Kern County. The first component was a geospatial analysis to examine the extent to which farmland might be excludable from regular notification requirements based on available utility service area data. Results indicated that less than 0.01% farmland parcels are outside known utility service areas, where no subsurface facilities are present. Based on these findings, staff recommended that no changes be made to the existing process requiring submission of an initial ticket request for areas of continual excavation such as farmland.

These results led to a follow-up analysis focused on estimating the number of excavation tickets submitted by farmers for common agricultural excavation practices in relation to the estimated number of agricultural excavations (**see Figure 1**). Data on number of tickets submitted for areas of farmland for Kern County for the years 2016 through 2018 was obtained from USA North 811 to determine how many

Major Studies

tickets were called in for normal farming activities during that timeframe. The analysis assumed that at least one common agricultural excavation per year was conducted on each parcel of farmland. Participation in the 8-1-1 notification process for common agricultural excavation activities was found to be approaching 0%.

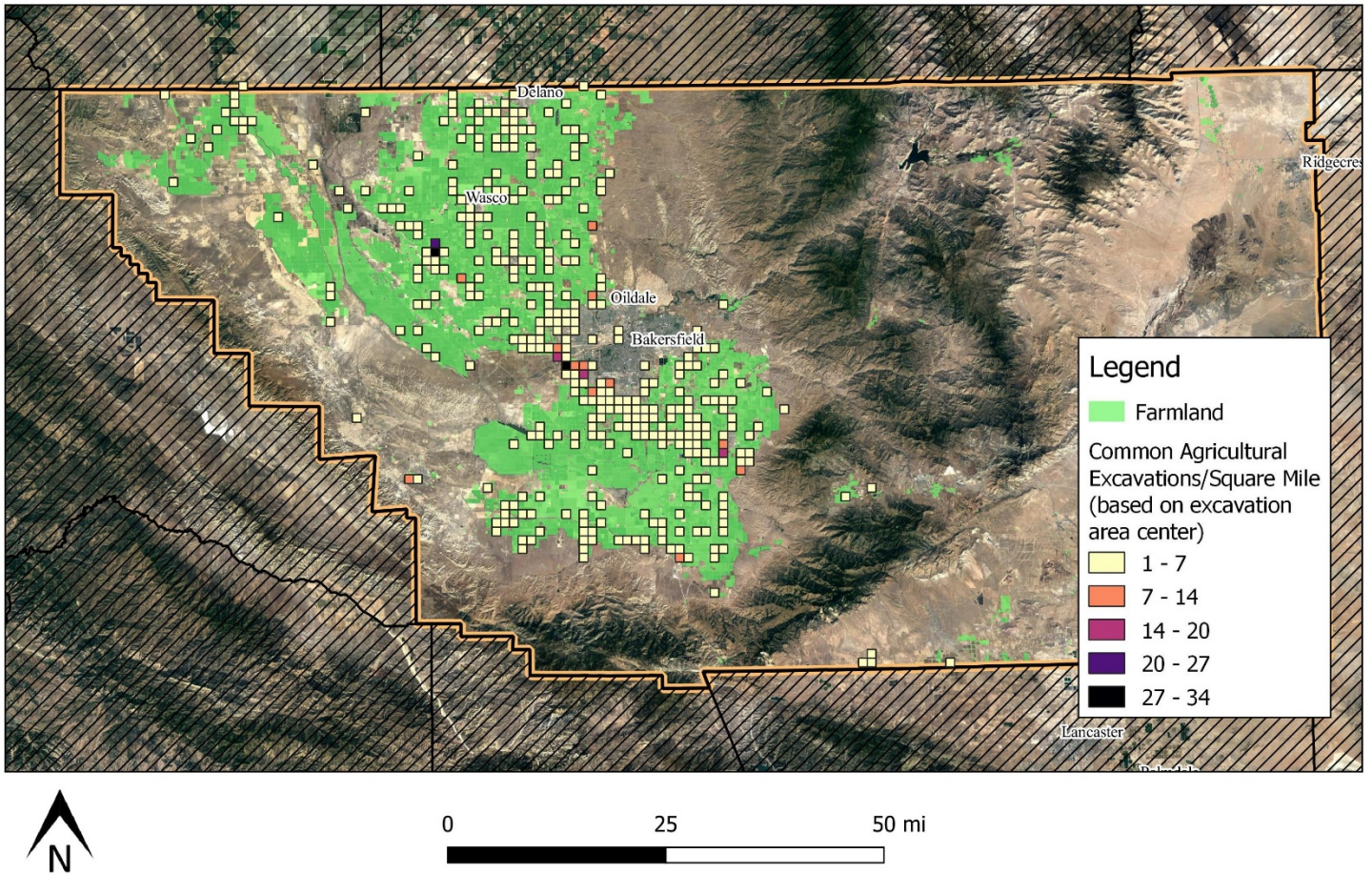


Figure 1: Estimated Volume of Excavation Tickets for Common Agricultural Practices from 2016-2018 in Kern County

Based upon these findings, staff recommended that no changes be made to the initial ticket process for such excavations. However, staff recommended allowing all continual excavation tickets access to a modified renewal process which would further promote safe excavation on such parcels. The Board concurred with staff's recommendation and voted to open the formal rulemaking period for proposed regulations to require the one-call centers to send electronic renewal reminders to holders of continual excavation tickets. The two staff reports that constitute this study are listed as attachments.

Fiscal and Staff

The Board is funded via the Safe Energy Infrastructure and Excavation Fund. Funding was initially appropriated in the FY 2017/18 budget via a loan from the California High-Cost Fund-B Administrative Committee Fund to be paid back with interest by July 1, 2019. The approved FY 2018/19 budget included initial fee revenue as well as the approval of a Budget Change Proposal submitted by Board staff to extend the loan repayment deadline to July 1, 2021. The approved FY 2019/20 budget included an increase in revenues as well as an increase to expenditures.

Any financial penalties assessed by the Board, or by the Contractors State License Board, Public Utilities Commission, or Office of the State Fire Marshal, for violations of Gov't Code 4216 *et seq.* go to the Safe Energy Infrastructure and Excavation Fund, but may not be used to support Board operations.²⁶ Instead, penalty money must be used for grants to support targeted education and outreach programs.²⁷ The Board has yet to collect any penalty fees and does not plan on developing a grant program for several years.

The current reserve level per the approved FY 2019/20 budget is approximately \$5.5 million. Spending has increased as the staff has grown and as initial one-time startup costs have been incurred. There is no statutory reserve level, but staff has determined that a reserve of no less than 25% of operating costs is appropriate.

Appropriation

Reserve Level

²⁶ Gov't Code § 4216.24

²⁷ Gov't Code § 4216.17

Fund Condition

Table 6: Detailed Fund Condition Statement

Fund 3302: Safe Energy Infrastructure and Excavation Fund	2017-18 Actual	2018-19 Budgeted	2019-20 Budgeted	2020-21 Projected	2021-22 Projected	2022-23 Projected	2023-24 Projected
Amounts (in thousands)							
Beginning Fund Balance	\$ -	\$ 4,811	\$ 2,585	\$ 5,455	\$ 919	\$ 3,037	\$ 2,058
Adjusted Beginning Fund Balance	-	4,811	2,585	5,455	919	3,037	2,058
Revenues, Transfers, and other Adjustments							
Revenues							
Regulatory Fees	\$ -	\$ 1,485	\$ 7,000	\$ 7,000	\$ 6,109	\$ 3,012	\$ 3,800
Delinquent Fees	-	-	-	-	-	-	-
Penalty Assessments	-	-	-	-	-	-	-
Transfers and other Adjustments							
Loan from High Cost Fund B Administrative Fund (0470) to the Safe Energy Infrastructure and Excavation Fund (3302) per 2017-18 Budget Item 8660-401-0470	7,406	-	-	-	-	-	-
Loan Repayment from the Safe Energy Infrastructure and Excavation Fund (3302) to High Cost Fund B Administrative Fund (0470)	-	-	-	(7,406)	-	-	-
Total Revenues, Transfer, and other Adjustments	7,406	1,485	7,000	(406)	6,109	3,012	3,800
TOTAL RESOURCES	\$ 7,406	\$ 6,296	\$ 9,585	\$ 5,049	\$ 7,028	\$ 6,049	\$ 5,858
Expenditures and Expenditure Adjustments							
Expenditures							
State Operations - Support	\$ 2,595	\$ 3,613	\$ 3,851	\$ 3,851	\$ 3,712	\$ 3,712	\$ 3,712
Adjustments	-	98	-	-	-	-	-
Statewide Assessments Pro Rata	-	-	279	279	279	279	279
Total Expenditures and Expenditure Adjustments	\$ 2,595	\$ 3,711	\$ 4,130	\$ 4,130	\$ 3,991	\$ 3,991	\$ 3,991
Ending Fund Balance	\$ 4,811	\$ 2,585	\$ 5,455	\$ 919	\$ 3,037	\$ 2,058	\$ 1,867

Figures for the 2017-18, 2018-19, and 2019-20 Budget years were reported in the 2019/20 Enacted Budget.²⁸ Expenditures for 2017-18 reflect actual amounts, and expenditures for 2018-19 and 2019-20 reflected budgeted amounts. Figures for the 2020-21 fiscal year and beyond are extrapolated from the 2019-20 Enacted Budget and are subject to review and approval by the Legislature through the state’s budget process.

²⁸ www.ebudget.ca.gov

Updated information, including proposed amounts for fiscal year 2020-21 as well as updates to the amounts for previous years will be included in the Governor's budget to be released by January 10, 2020. As may be seen in the fund condition statement, the fund is in a structural deficit, which could impact operations in the mid-to-late 2020s, so the Board may need to raise the estimated \$3.8 million to be collected in out-years.

Revenue levels are set to allow the Board adequate revenue to cover existing operations and build up sufficient amounts to repay the startup loan (with interest) by the statutory deadline of July 1, 2021. As such, the fee amount was established higher in earlier years and is estimated to decrease once the loan has been repaid and an adequate reserve amount has accumulated.

Revenue

Revenue is derived from a fee assessed on one-call center members. The fee is only charged to those members who received 200 or more locate requests in the previous calendar year and is applied proportionally based on number of locate requests. Members are assessed the charge on their one-call center membership bills. As such, the charge is collected by the one-call centers on their members' billing schedules, which vary. For DigAlert, invoices are sent monthly. USA North invoices on monthly, annual (calendar year), and annual (fiscal year) cycles.

Revenue is not recognized at the time it is paid to the one-call centers. Instead, one-call centers, pursuant to regulation,²⁹ are required to remit payment to the Board on April 1 and October 1 of each year. Pursuant to regulation, the Board will be able to assess a late fee of 5% on any one-call center member who is delinquent in paying the assessed fees to the applicable one call centers. In this instance, the Board would collect the fee directly from the one-call center member.

Reduction or delay in revenue may impact the ability of the Board to repay the loan by the established deadline. One large operator responsible for approximately 8% of fee revenue is currently in bankruptcy proceedings and has not paid its regulatory fee. Board staff is actively monitoring the situation.

²⁹ Section 4010 of Title 19 of Code of California Regulations

Expenditures

Expenditures for State Operations include amounts for Personnel Services as well as for Operating Expenses and Equipment. The Board is currently budgeted for 23.0 FTE positions (see **Attachment 2**), two of which provide support in CAL FIRE's Management Services Division. Significant one-time expenditures have included the purchase of vehicles, office furniture, moving, and tenant improvements, IT hardware, investigation equipment, and the cost of developing a records management system for investigations.

Expenditures also include a pro-rata amount allocated to cover general administrative services provided by central service departments such as the California Department of Human Resources and the Department of General Services. This amount is calculated by the Department of Finance and is charged directly to the fund independent of the Board's budgeted amounts. The Pro Rata can fluctuate from year to year and any future projections are subject to change.

Public Engagement

The Board posts its notice and agenda on its website in advance of the 10-day Bagley-Keene Open Meeting Act notice deadline. Meeting materials are usually posted online at least five days in advance. Staff have adopted the goal that meeting materials be posted at the time of notice posting and have met that mark several times in 2019. Minutes are posted to the website soon after approved by the Chair and the Executive Officer. Minutes were slow to be drafted and approved through the first several months of 2019 due to staffing issues and the pace of monthly meetings. All meeting agendas, notices, minutes, and related materials remain accessible through the Meetings & Business section on the Board's website.

The Board webcasts its meetings and public workshops via GoToMeeting, which provides meeting audio in conjunction with an online platform through which the public may submit typed comments. Throughout meetings, the Chair regularly asks whether there are web comments, at which time any comments are read aloud by the staff member monitoring the webcast. Thus far, webcast recordings are not posted to the Board's website. In the future, the Board plans to transition to video webcasting, with the intention being that the video recording would remain available to the public online as long as is practicable. Hurdles to webcasting include procurement of equipment or contracting the service, identification web hosting, and contracting for close captioning service for the hearing impaired.

In 2018, the Dig Safe Board's first year conducting meetings, its meeting dates and locations were posted to the Board's website on a month-to-month basis as dates, locations, and agenda items came together. As such a system was as inconvenient to Board members and the public as it was stressful to staff, the construction of the meeting calendar improved in 2019, when the Board's meeting calendar was posted to its website in two phases: first covering meetings scheduled to occur from January to December and second when meeting locations were determined, at least one to two months in advance. For 2020, Board staff was able to post all regular meeting dates to the Dig Safe Board website on August 15, 2019.

Meeting Notice Policies

Website Accessibility of Meeting Materials

Webcasting Meetings

Meeting Calendar

Public Information Disclosure Policies

The Board believes that the public's interest in disclosure of information about excavation-related damage to utility facilities is compelling. And the Board has memorialized its commitment to ensuring public access through compliance with legislative and administrative requirements. (Resolution No. 18-01-04.) The Board recognizes that those requirements include the Bagley-Keene Open Meeting Act, the California Public Records Act, conflict of interest requirements, and other access rules such as the Government Code section 4216.12 provision for legislative review.

Enforcement Proceedings Conducted in Open Session

As there is no applicable closed meeting exemption in the Bagley-Keene Open Meeting Act applicable to Board enforcement hearings, the Board will hear appeals to notices of probable violation during open session. Similarly, the Board will deliberate on its decisions during open session. The Board does not view the lack of an open meeting exemption as an obstacle but consistent with its value of a culture of continuous learning based on the development and free exchange of safety information (Policy B-04).

When a subject appeals a citation by the Board, the damage notification and related information will be disclosed during open session. The related documents will be made available to the public as required by open meeting laws. The subject will have the opportunity to respond during the open session.

Disclosure of Investigation and Enforcement Documents

The Board is developing its investigation and hearing processes, and does not currently publish notices of probable violation and disciplinary actions on its web site. However, the Board anticipates disclosing documents related to notices of probable violation, investigations, and disciplinary actions once enforcement activities are underway. The Board anticipates further developing its disclosure policy in a way that generally parallels the DCA's Recommended Minimum Standards for Consumer Complaint Disclosure.³⁰

If the Board's disclosure practices develop in a way that departs from the DCA's standards, we expect those

³⁰ https://www.dca.ca.gov/consumers/complaints/disclosure_standards.shtml, as of October 10, 2019

departures to be driven by specific enforcement and outreach needs. The notifications of damage that the Board acts on differ from those received by boards and commissions with the Department of Consumer Affairs. The Board agrees with DCA's conclusion that the Information Practices Act does not preclude the release of information that pertains to the conduct of business.

In the Board's experience, there is no dispute as to the nature and extent of damage to a utility facility reported in a damage notification. And the notifications don't involve harm arising from a consumer transaction or danger to a practitioner's professional reputation.

The Board anticipates complying with any statute that prohibits disclosure. However, we have not yet reached a conclusion regarding the policy interests involved with disclosure (1) when a complaint lacks merit, or (2) when a complaint involves a matter outside the Board's jurisdiction. Unlike the Department of Consumer Affairs Board, the Board rarely deals with allegations of moral turpitude by a licensed professional, breaches of trust, or disputes as to whether an event occurred. For that reason, dig safe violation information rarely requires the same level of privacy protection.

The dispute before the Board is usually the reason that an excavator damaged a utility facility. The occurrence of that damage almost always results from a violation of dig safe laws. The Board's statutory charge is to investigate possible violations, which means determining the cause of the strike. The Board will not know if a complaint lacks merit until after investigating the incident. And that investigation will likely identify the cause of the incident. Whether a complaint correctly alleges the cause is of little consequence.

Regarding subject matter outside the Board's jurisdiction, we don't expect the Board to expend resources investigating such matters. And in those instances, there would be no report of investigation to disclose. Regarding the complaint itself, the Board has not yet determined how long such records will be retained.

The Department of Consumer Affairs standards recommend withholding information about a complaint in two circumstances:

Complaint Disclosure and Privacy

(1) Disclosure might compromise an investigation or prosecution;

(2) Disclosure might endanger or injure the complainant.

The Board anticipates incorporating these standards into the Board's practice and disclosure policy.

Education and Outreach

The Dig Safe Board has a strong commitment to education and outreach that reaches into all aspects of its work from rulemaking and standards development, to investigations, enforcement, and data analysis. This commitment is rooted in statute, where the Legislature identified coordination of education and outreach activities that encourage safe excavation practices as a foundational function of the Board, and is reflected in the Board's mission and enforcement philosophy (Policies B-02 and B-05, respectively). All outreach and education activities thus far have required messaging and resources to increase name recognition and basic awareness of the Dig Safe Board, while simultaneously working to address specific safety and compliance issues.

Throughout the Board's first two years of operation, Board members and staff have worked diligently to identify opportunities to conduct outreach through established industry channels and used those opportunities to inform stakeholders and the public about the Board; its rulemaking, investigations, and enforcement efforts; and safe excavation practices. These opportunities also allowed Board members and staff to build name recognition and encourage stakeholder participation in Board activities. It is through these efforts that the Board has and will continue its work to establish itself as a new government agency, as it cannot rely on established industry familiarity and communication pathways in implementing any of its objectives.

Part of the Board's work to conduct this outreach includes its Annual Spring Open Forum, which is an effort by the Board to allow for the free exchange of safety information per its Values Statement, (Policy B-04), by giving the Board's diverse stakeholders an opportunity to discuss their issues outside of the Board's rigorous work to achieve its legislative requirements. The first Spring Open Forum was held in April 2018, the second in May of 2019. In its first year, the Board received one Spring Open Forum entry.

Efforts to Introduce the Board

To generate more participation from stakeholders, the Board promoted its second annual Spring Open Forum in the following ways:

- On the Board's website
- A link sent via email to the Board's Stakeholder list.
- Through a flyer at the Board's April meeting in Corona
- Through a flyer at the Board's April Reasonable Care Standards Workshop in Sacramento
- Through outreach at the DigAlert Annual meeting in Corona
- Through outreach at the Pipeline Safety Conference in Long Beach
- Through outreach at the Sacramento Regional Builders Exchange Expo at Cosumnes River College in Sacramento
- Through outreach at the California Regional Common Ground Alliance (CARCGA) Mock Strike Event at Cosumnes River College in Sacramento

The 2019 Spring Open Forum opened on March 19, 2019 and closed on May 1, 2019. During that time, the Board received a total of five open forum entries. While this was a 400-percent increase in participation from the first year, it highlights the difficulties the Board has getting its name out to its stakeholders, and in turn, fully understanding the diversity of its stakeholders and their education and outreach needs. This will continue to be a challenge for the Board's education and outreach efforts until it can dedicate sufficient time and resources to establishing familiarity and communication pathways with industry actors.

In addition to the Spring Open Forum, the Board was featured in a handful of news articles and safety publications, and Board members and staff made presentations at a variety of industry conferences, meetings, seminars and symposiums. An overview of the Board's work to create awareness about its existence, its mission, and its work to create regulations, policies and standards from January 1, 2018 to Present day is available for review at the end of this report (**Attachment 1**).

Education Course Development

Consistent with the graduated approach expressed in the Board's Enforcement Philosophy (Policy B-05), and in subdivision (e) of section 4216.19 of the Government Code, the Board is required to offer relevant, affordable education in-lieu of fines. To meet this requirement, the Board is in the

process of creating an in-house educational course. The decision was made in late 2018, after the Board was unable to identify an existing affordable and relevant course. At the direction of the Board's Education Committee, the course curriculum will focus not only on specific code requirements but on the human factors and safety culture characteristics necessary to understand, internalize, and evangelize the laws.

Prior to work producing the Board's education in-lieu of fines course, staff spent several months researching in house course creation versus contracting the work to an outside organization. In April 2018, staff met with potential vendors to discuss the possibility of contracting out the building of the Board's educational curriculum, and what doing so would entail. Outsourcing would allow the Board to offer classroom, onsite, and online courses to satisfy its sanction and organizations selected to create the courses would do so at no cost to the Board, but would collect course fees to recoup their costs. However, staff resources to conduct the courses would be limited.

At the Board's August 2018 meeting in Westlake Village, the possibility of offering courses in-house, conducted by staff, was discussed for the first time. Board members discussed the possibility of collaborating with Member Del Toro's company ehs, Inc.—which specializes in the development of health and safety education and curriculum across the nation—to build the course curriculum, and run it in-house using staff as instructors. This possibility was not considered earlier because of its use of staff resources. Bringing the development of an educational course in-house would require the Board to focus solely on classroom courses. The Board would create the course and content, use staff as instructors, and use current office space to host classes.

Following staff research, the in-house course creation option was chosen over outsourcing because the Board would have full control over course content, and the cost to end-users would likely be lower than if course production had been outsourced. This option will require a significant amount of staffing resources to complete, and has taken precedence over other education and outreach activities the Board has identified as important.

In-House vs. Contract Development

Multimedia Storytelling

In November 2018, staff traveled to Irvine to meet with Member Del Toro and her staff at ehs, Inc. to begin developing an outline of the education in-lieu of fines curriculum. Members Del Toro and Johnson, with the advice of staff and information from ehs, Inc. employees, decided on a multimedia course that uses video, PowerPoint and classroom discussion and activities to teach students the information in an engaging way.

Videos would be produced by staff and introduce case studies of three past dig-ins in California and across the country to provide context:



Paso Robles

An excavator struck a water line in 2008, flooding a trench and killing two people. Misreading of a map of the excavation site and a lack of positive identification of the line were likely factors in this case.



Kansas City

A gas distribution line was struck in 2013, causing an explosion that killed one and injured 15 others. Improper potholing was a likely factor in this case.



Walnut Creek

A high priority petroleum pipeline was struck in 2004, causing an explosion that killed five and injured four others. A lack of an onsite meeting and positive identification of the line were likely factors in this case.

The videos will be followed by classroom discussion and activities and a PowerPoint presentation that highlights the importance of communication and how different work practices related to subsurface installations affect one another. The variety of teaching methods the course utilizes will allow the Board to engage a variety of course attendees who learn in different ways by reinforcing the information presented through listening, reading, and doing.

The decision to use videos to introduce the facts of each case came from the desire to create a course that not only taught students important safety information, but kept them engaged. The initial thought was to use photos and news video from each case study, but after months of staff work that started in January and is still ongoing today, to gather the visuals needed with limited success, the decision was made to use audio, sound effects, and graphics to illustrate the facts of the case in each video and incorporated the visuals staff could gather in the classroom discussion and activities to reinforce the information presented in each video. Video production is ongoing, and expected to be completed in early 2020.

Course Development

Once the case studies were identified, staff began researching the facts, gathering information in the form of investigations, news articles, and reports, and identifying the violations of Government Code 4216. Research began in late 2018 and continued through late summer 2019. Since January, staff identified multiple city, county, and state agencies who responded to each incident and requested investigation documents and reports. The process to obtain these reports has proven challenging and time-consuming, as some agencies were slow to respond, and others had trouble locating the information. After months of requests and follow ups with city, county, and state agencies around the country, staff is currently awaiting the delivery of one last report needed for the development of the course case study video and curriculum.

During the information gathering process, staff also spent time reading through each report and mapping the facts of the case to identify the who, what, when, where, why, how, and sequence of events for each case. The fact-mapping process was necessary for staff to develop a narrative for the course videos. Creation of the narrative for each case study took up to several weeks. The scripts were first written, then went through several rounds of internal staff review and

editing, prior to being presented to the Board's Education Committee for edits and approval. Prior to script development, staff spent all of 2019 working to gather relevant visuals to tell the stories of these incidents. For each case, requests for images and video have been made to the appropriate news organizations and investigating agencies.

The Board's course curriculum development depends on the development of the course video narratives. Staff have begun identifying engagement points in the completed scripts to be referenced in the classroom discussion and are developing the course curriculum for the introduction, Government Code 4216 Overview, and Paso Robles and Kansas City Case studies. The remainder of the curriculum development depends on a final report for Walnut Creek that staff has not yet received.

Per the 2019 Plan, the Board was expected to have its course operational by summer 2019. While staff has managed to overcome the unforeseen obstacles, the amount of work that remains to complete this course will push the Board's completion date back (**Table 7**). Per statute, Board enforcement begins July 1, 2020,³¹ though the Contractors State License Board, Public Utilities Commission, and Office of the State Fire Marshal have had the ability to enforce based on a Board recommendation since January 1, 2017. The Board's education course is expected to be ready in time to be applied as an enforcement action by the Board and its partner state agencies.

³¹ Gov't Code § 4216.6

Table 7: Detailed Timeline Showing Activities Needed to Complete the Board’s Education In-Lieu of Fines Course.

Education In-Lieu of Fines Course Development Needs																							
OBJECTIVE	2019												2020										
	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N
Phase One: Case Study Videos Development																							
Case Study One: Paso Robles																							
Gather Information & Available Visuals																							
Create Narrative Script																							
Record Audio Track																							
Create Graphics																							
Edit Case Study Video																							
Case Study Two: Kansas City																							
Gather Information & Available Visuals																							
Create Narrative Script																							
Record Audio Track																							
Create Graphics																							
Edit Case Study Video																							
Case Study Three: Walnut Creek																							
Gather Information & Available Visuals																							
Create Narrative Script																							
Record Audio Track																							
Create Graphics																							
Edit Case Study Video																							
Phase Two: Curriculum Development																							
Line Employee Curriculum Development																							
Introduction																							
4216 Overview																							
Paso Robles Case Study																							
Kansas City Case Study																							
Walnut Creek Case Study																							
Review																							
Create Student Handouts																							
Create Trainer Handbooks																							
Create Course Evaluation Sheet																							
Create Course Completion Certificate																							

Phase Three: Course Logistics																													
Identify Classroom Locations																													
Determine Course Fee																													
Develop Course Registration Process																													
Purchase Needed Course Materials																													
Create Course Resources Page Online																													
Create Course Evaluation Review Process																													
Create Course Beta Testing Plan																													
Phase Four: Present Course to the Board																													
Present Course to the Board																													
Phase Five: Course Beta Testing																													
First Round of Beta Testing																													
Second Round of Beta Testing																													
Third Round of Beta Testing																													
Phase Six: Course Goes Live																													
Education In-Lieu of Fines Course Live																													

Annual Education and Outreach Meeting

In passing the Dig Safe Act of 2016, the Legislature directed the Board to meet annually to discuss existing education and outreach needs identified around the state.³² The Board held its first education and outreach meeting on April 19, 2018 in Long Beach, which consisted of a workshop discussion and an online survey soliciting stakeholder views of education and outreach needs.

In 2019, the Board held its second annual Education and outreach meeting on September 10, 2019 at the Los Angeles Department of Water and Power's Central District Yard in Downtown Los Angeles. As outlined in its 2019 Plan, prior to the meeting, the Board reached out to stakeholders on the specific topics they wanted covered this year. Staff worked with United Contractors (UCON) and the Southern California Contractors Association (SCCA) to gather feedback from their members, who discussed wanting more opportunities to ask operators questions about safe excavation practices. Staff worked with telecommunications, cities and/or municipalities, natural gas, petroleum, and electricity facility owners to organize a panel discussion on improving communication in the field. UCON and SCCA members provided questions for the panel designed to expand excavator knowledge about how to better interact with facility owners.

The Board's Education and Outreach Meeting agenda included a presentation and discussion of the results of the Board's second education and outreach survey. The survey solicited opinions regarding which groups had the highest awareness needs, favored training methods and information retention, preferred education material formats, and how excavation materials are received (see **Figure 2 and Figure 3**). This information is helping the Board better understand where and how to target its education and outreach efforts. The survey was promoted at Board, one-call center and CARCGA meetings and was advertised on the Board's website and through the Board's stakeholder email list. The survey received 61 responses from a variety of Board stakeholders.

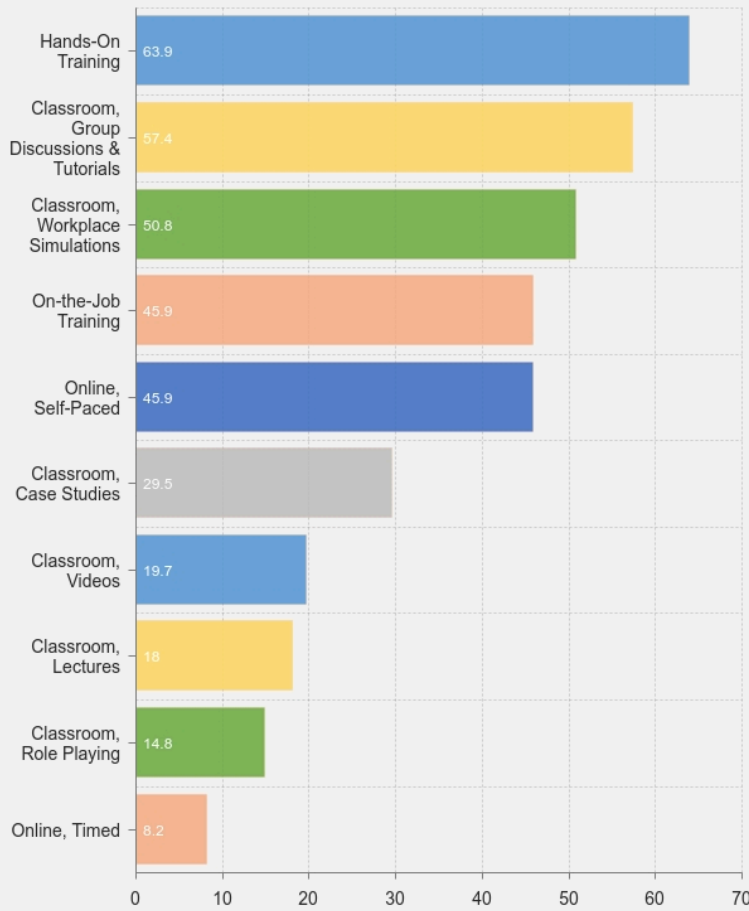
³² GOV 4216.17

Figure 2: Infographic illustrates a breakdown of who responded to the survey, the top three groups survey respondents identified with the highest awareness needs, and the top four areas identified for the Board to direct outreach.

Under Survey Respondents, the field marked other includes one-call center employees, insurance company safety consultants, and safety managers.



Training Methods Desired



Educational Materials Desired

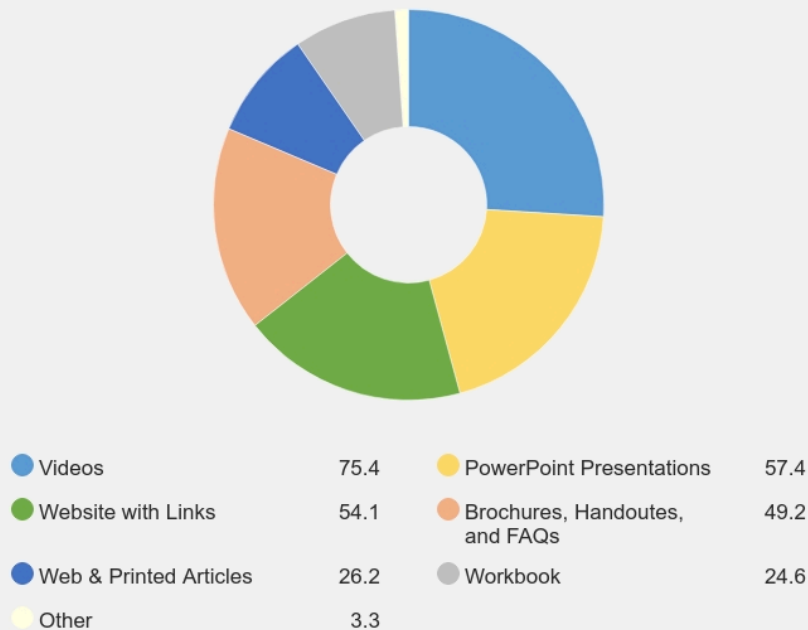


Figure 3: Infographic illustrates a breakdown of responses to the Board’s education and outreach survey regarding training methods and educational materials that will help direct the Board’s decision-making as it works to establish its education and outreach program

At the meeting, the Board asked stakeholders to discuss the following questions:

- What is your organization currently doing to provide education on excavation safety?
- How can the industry better coordinate current education and outreach efforts to be more effective?
- Where can the Board add to existing education and outreach efforts to improve the understanding of excavation safety?



September 10, 2019: Stakeholders Discuss Existing Education and Outreach Efforts with Board Members and Staff at Second Annual Dig Safe Board Education and Outreach Meeting in Los Angeles

In addition to a presentation and discussion of the Board’s survey results, the Board’s Education and Outreach Meeting agenda also included a presentation of the top five trends the Board’s Investigations Division identified through investigations (See “Top 5 Trends” later in this report). This presentation provided the Board an opportunity to examine its current education and outreach efforts, and identify any needs for targeted outreach.

The Board will use the feedback received at this year’s meeting to guide its education and outreach efforts around the state, as well as the development of its future Education and Outreach meetings. The 2019 meeting demonstrated to the Board that it will have difficulty acting on stakeholder feedback with its existing education and outreach resources.

Outreach for Regulatory Activities

Under the Dig Safe Act of 2016, the Board is expected to coordinate the state's safe digging education and outreach, develop safe digging standards where none exist, investigate possible violations of the state's safe digging laws, and enforce the state's safe digging laws within its jurisdiction. To meet these Legislative requirements, the Board identified the following regulatory milestones through its 2018 and 2019 Plans: establish a funding source by July 1, 2019, develop minimum standards for onsite meetings in areas of continual excavation by January 1, 2020, and adopt regulations to implement Assembly Bill 1914 to determine the type of power-operated equipment excavators may use to find the exact location of subsurface installations by July 1, 2020.

Workshops can be effective in soliciting stakeholder feedback, as the Board recognized in its Policy B-04, which highlights the value of "respect for and attentiveness to the expression of differing backgrounds and perspectives of the Board's members, the public, and stakeholders." For instance, engaging stakeholders in the regulation development process has thus far assisted the Board in creating rules consistent with common sense and experience and allowed farmers and flood control operators the opportunity to provide feedback on a process that will ultimately impact how they do their jobs on a day-to-day basis.

The Board routinely holds several workshops at its meetings to discuss the policy, followed by multiple workshops to discuss the regulatory language, prior to Board approval of formal rulemaking proceedings. Not everyone is able to come to the Board's workshops, therefore members and staff have reached out to stakeholders in a myriad of other ways. The following activities were conducted in addition to monthly workshop activities at Board meetings.

Both one-call centers, based on their experience and their difficulties in being provided up-to-date contact information, counseled the Board that many members would be surprised by the fee regardless of the effort of outreach. The Board's outreach consisted of a May 22, 2018 web conference to introduce the fee to one-call center members and answer their questions, followed by notification in June of the fee rulemaking, as required by the state's Administrative Procedures Act. Of the approximately 2,100 members of USA North 811 and DigAlert, staff received

Regulatory Fee

approximately 400 bounce-backs. It is not clear, however, that out-of-date contact information was a contributing cause to the subsequent feepayer confusion, as approximately 35% of the 2,100 members do not receive at least 200 ticket transmissions a year—the threshold for whether one is assessed a fee.³³

Staff also reached out directly to the California Water Association, the Association of California Water Agencies, the California Water and Environment Association, the California State Association of Counties, and the League of California Cities asking that they inform their members about the upcoming fee. The one-call centers provided their own outreach. DigAlert, who bills members monthly, provided information on member invoices several months in advance of January 1, 2019 to notify them of the new fee and provided Dig Safe Board staff contact information. USA North 811, who invoices most of its members annually, provided its members a letter in November informing them of the center's 2019 budget and Board fees.

Despite the initial outreach, staff received over 170 phone calls and emails between February to April of 2019 from fee payers with questions regarding the fee. Staff created a Frequently Asked Questions (FAQs) sheet, which was posted to the Board's website and distributed via hyperlink to members of the one-call centers in their billing invoices. The document addressed the questions that are most frequently asked. Staff spoke to fee payers and directed them to the Dig Safe Board's website to review the FAQs sheet, the Board's 2019 Cost Report, and fee regulation text, which provide purpose, reference to authority, and written guidance on fee calculation and prediction. Staff also provided an update to the Board on the fee implementation of the fee, including background on past outreach efforts prior to the fee taking effect.

In an effort to continue educating one-call centers members about the fee and provide them information on the Board's projected expenses paid for by said fee, the Board produces an annual Cost Report, which is posted on its website and distributed to one-call center members. The 2020 Cost Report is expected to be released in the next couple months.

³³ Section 4010(a)(1), Title 19, California Code of Regulations

Area of Continual Excavation Onsite Meetings

To meet its statutory requirement to develop minimum standards for what must be discussed in an onsite meeting between farmers and high priority underground facility owners, the Board focused on creating a system where compliance is well-suited to regular farming practices and safety is a shared responsibility among excavators and operators. To this end the Board and staff expended substantial effort.



July 24, 2018: Dig Safe Board Members Meet with Farmers to Observe Everyday Agricultural Practices, and Discuss the Onsite Meeting Process

In July 2018, the Board invited farmers and facility owners to a workshop at the Kern County Farm Bureau Pavilion in Bakersfield to discuss farmer experiences excavating near high priority facilities, and current operator onsite meeting practices for agriculture. Several representatives from area farms attended the meeting along with representatives from a variety of utilities. At the Board's August 2018 meeting, operator representatives made presentations discussing current damage prevention practices, including patrols of facilities located underneath agricultural land on the ground and from the air. In September 2018, staff conducted outreach to operator representatives in California and across the nation to discuss onsite meeting protocol, where they had a specific policy for agriculture, and the potential use of a standard form or checklist.

From October to November of 2018, the Board released an online survey for farmers and underground facility owners to gather input on the existing onsite meeting process.

Farmers who participated in the survey were asked questions, including:

- which operators they work with
- how often onsite meetings are held
- the operator representatives' knowledge of farming practices
- whether the operator uses a standard form
- what is included on that form
- whether they get a copy of the form, and
- the types of equipment they call 811 for before using.

Meanwhile, underground facility owners who participated in the survey were asked a different series of questions:

- the farmers they work with
- whether they use a standard form or checklist
- the types of equipment that cause concern when operated over their line
- why the equipment causes concern
- how often disagreements with farmers happen, and
- how those disagreements are documented and resolved.

The Board advertised the survey in 10 county Farm Bureau newsletters, and via email to the members of the one-call centers, and received a total of 21 responses to the survey.

To further engage California's agricultural community, staff conducted outreach to county Farm Bureaus starting in August to schedule presentations regarding the Board's area of continual excavation rulemaking development. Throughout the month of October and into early November, staff traveled to six county Farm Bureaus to make presentations to Farm Bureau members about the onsite meeting regulation development, and to get their input about the current process (

Figure 4).

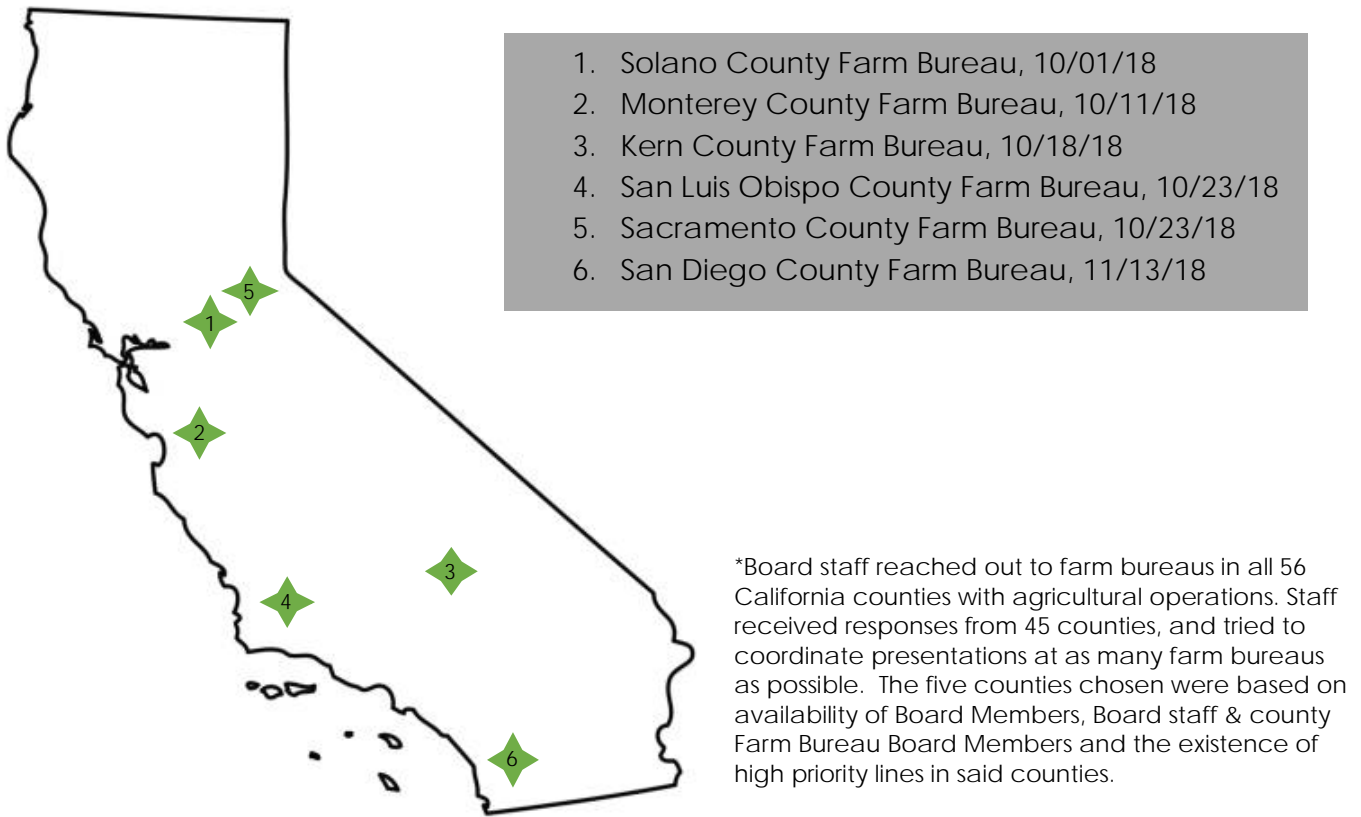


Figure 4: Fall 2018 Area of Continual Excavation Outreach

During that time, staff and members also took a phone call from a concerned farmer in Yolo County regarding the current onsite meeting process, and gathered input regarding the Board’s rulemaking development. That same month, the Board invited farmers and underground facility operators to a workshop in Sacramento to discuss minimum standards that should be required at onsite meetings. The feedback received helped inform the development of the Board’s onsite meeting regulations, which the Board approved in July 2019 and will take effect January 1, 2020.

In addition to creating minimum standards for on-site meetings, the Legislature also tasked the Board with creating regulations that minimize or eliminate the impact of an annual ticket process to farm operations on land where no subsurface installations exist. To better learn about the future renewal ticket process, staff traveled to Bakersfield in June to facilitate a meeting between representatives from the one-call centers and several central valley farms to

Area of Continual Excavation Ticket Renewal

discuss the future annual ticket process for areas of continual excavation.

Farmers shared issues they are running into with the current system, their needs when creating a ticket, and the common licensing practices they participate in that may help the one-call centers verify that a farmer is in fact calling in for a ticket. The one-call center representatives discussed the development and availability of their apps and their mapping limitations. The issues discussed will help inform the Board's development of future educational materials and outreach strategies as it works to implement its area of continual excavation regulations.

AB 1914 Implementation

Assembly Bill 1914 (or "AB 1914") was signed into law on September 23, 2018, amending Section 4216.4 of the Government Code to allow for the use of power-operated or boring equipment within the tolerance zone prior to determining the exact location of subsurface installations. This exception to hand tool use is to take effect beginning July 1, 2020 under circumstances and conditions to be determined by the Board through regulations.

To better understand the current use of power tools in the tolerance zone, the Board held two online surveys beginning in March and running through April—one directed toward utility operators and the other toward all other industry stakeholders—to gather feedback on a range of potential factors including tool types, soil conditions, and mutual agreement. The Board promoted the survey via email to its stakeholder list and through the one-call centers, through promotion at its public workshop in March, and via a flyer distributed at the Sacramento Regional Builder's Exchange Expo in Sacramento and the CARCGA Mock Strike event at Cosumnes River College in Sacramento, and received 99 total survey responses: 42 from operators and 57 from a mix of excavators, locators, and design/engineering professionals. The survey results captured safety insights from industry professionals with decades of experience, pointed to areas of agreement between operators and excavators, and highlighted points where the Board would need to work to resolve conflicting concerns between stakeholder groups.



March 24, 2019: Member Bianchini and staff discuss power tool use in the tolerance zone with attendees at public workshop in Sacramento

In March, the Board held a public workshop to solicit comments from stakeholders regarding the implementation of AB 1914, its goal to generate conversation among a cross-section of industry stakeholders. Seventy-five people participated, at least 25 of whom participated via the webcast. Attendees included third party excavators, representatives from all utility operator segments, as well as engineering and design professionals. Although the workshop was held in Sacramento, many attendees travelled from Southern California to participate. Participants expressed their perspectives and acknowledged the sometimes-conflicting concerns of other stakeholders.

The conversation informed the Board's power tool regulations, which would address excavator needs while remaining mindful of safety, protecting the facilities in the ground, and the enhancing improve excavator-operator communications.

Outreach for Standards Development Activities

The Legislature tasked the Board with developing reasonable care standards in the Dig Safe Act of 2016. While lawmakers did not limit the standards the Board may develop, those listed in section 4216.18 of the Government Code are required. At the request of the Board, the California Regional Common Ground Alliance (CARCGA) held stakeholder discussions during its Subsurface Safety and Incident Prevention (SSIP) Committee meetings to address standards related to reasonable care, and was asked to put together a draft of their findings to present to the Board for approval in 2019.

Stakeholder Engagement

The decision was made to give CARCGA a role in the standards development process both in recognition of their status as the state's only non-profit entity devoted to open participation by operators and excavators for damage prevention and in an effort to promote participation in CARCGA by both excavators and operators. In April, CARCGA's SSIP Committee provided their recommendations to Board staff.

Public Workshop

On April 24, 2019, the Board held a public workshop to solicit comments regarding development of reasonable care standards. The workshop was promoted at the Board's April meeting at DigAlert in Corona, at the two-day Sacramento Regional Builder's Exchange Expo where the Board had a booth set up, and via the Board's stakeholder email list. Representatives from utilities, labor, contracting firms, and engineering firms attended the workshop. The discussion highlighted the differences in what various stakeholder groups are looking for in standards put forth by the Board and the difficulty the Board faces in limiting the role liability plays in shaping the standards discussion.

Progress on reasonable care standards development has been slow, mainly due to the need to direct staff resources toward production of regulations subject to demanding statutory deadlines. Stakeholders have nonetheless consistently emphasized standards as an area in need of the Board's attention, though resources for continued work in 2020 have yet to be identified.

Throughout the Board's first two years of operation, it has become increasingly clear that current resources are not sufficient to meet the education and outreach requirements as prescribed in the Dig Safe Act of 2016. The Board is a unique regulatory body that does not work with one type of stakeholder but works with a variety of industries from road builders to farmers to public works departments to telecommunications giants all requiring different needs. Understanding the needs of each industry and creating safety lessons tailored to each group takes time and resources. The Board currently has one position dedicated to the development and implementation of its education and outreach programs. This challenge is discussed further in "**Issue 1**".

Future Outreach and Material Development in Jeopardy

Investigation and Enforcement Program

The Dig Safe Act of 2016 created the Board to be an investigations hub. The Board is expected to enforce the state's safe excavation law on only a small segment of the excavation community, leaving the bulk of the One Call Law violations to be enforced by the Contractors State License Board, the Public Utilities Commission, and the Office of the State Fire Marshal.

As an investigations hub, the Board is expected to make an impact both by facilitating enforcement (through its own actions or by referring, pursuant to Gov't Code § 4216.6(c) & (d), to state and local agencies) and by determining the root causes of accidents to develop regulations and standards and focus educational efforts.

Prior to the Board, only dig-in incidents of significant consequence were investigated—usually only those involving death, injury, or a significant event such as a large explosion. For instance, only approximately 100 of the 5,000 or more gas dig-ins are immediately reported to the Public Utilities Commission each year.³⁴ On the other hand, Dig Safe Board investigators could potentially investigate 1,000 incidents. By investigating low-consequence events, the Board will have access to information about the precursors of safety problems. Investigation of low-consequence events allows the Board to have an education-first enforcement posture and to develop policy based on data and experience, so that it can focus on preempting the next incident instead of regulating the last one.

Regulators, such as the Dig Safe Board, have options in how they perform their missions. They are expected, by virtue of their office, to perform a leadership role, whether in the form of setting minimum performance levels or facilitating industry-wide discussions. To demonstrate its safety leadership, and to set expectations for the regulated public,

Role of Investigations

Board as Statewide Investigations Hub

Enforcement Philosophy

³⁴ Crowe Horwath, *Gas Safety and Reliability Branch Management and Operations Review: Report and Recommendations*, February 23, 2015, p. 1-6.

the Board adopted an Enforcement Philosophy in January 2019 (Policy B-05). This philosophy acknowledged the widespread poor understanding of safe excavation laws and recognized that many deviations from regulatory compliance are results of flawed procedures, simple mistakes, lack of understanding, or diminished skills. To promote a strong safety culture in the regulated public, including an open and transparent sharing of information, the Board's philosophy has the following three components:

1. Given evidence of unintentional error and lack of evidence of reckless or willful non-compliance, the Board's enforcement should focus on assisting violators in correcting non-compliances.
2. Given lack of evidence of unintentional error and evidence of reckless or willful non-compliance, the Board should use fines as an enforcement tool.
3. Board investigative staff should develop procedures to actively limit the influence of liability in determining what accidents and complaints to investigate.

Modern safety approaches stress the importance of *safety culture*, an important aspect of which is that near-misses, reported by front line employees, are recognized and managed as precursors to safety events. In this case, punishing errors—as opposed to willful noncompliance—can seriously undermine a safety culture.

While modern safety management systems have shied away from the punishment of unintentional error, their responses to intentional or reckless non-compliance remain punitive, and—if anything—the punishments have become *more* severe. The detrimental effect of punitive measures on safety culture lessens when the non-compliance arises from these causes, as no effective safety culture exists to damage. In these cases, the problem is not a result of an error, and financial or other punitive measures are more likely to effect behavior change.

The third component of the Enforcement Philosophy reflects the Board's commitment to safety, rather than serving contractors and utilities in their quest for damages. The Board has limited investigatory resources, so, should a complaint to the Board be widely viewed a tool for claims negotiation, those resources would be overwhelmed and

the Board's standing as a safety-focused body would be sabotaged.

Unlike many Department of Consumer Affairs Boards, the "consumer" in the One Call Law is ill-defined and the Board's involvement would usually only serve to place it in a business to business dispute.

The dig safe laws do not limit the rights of one injured, or who suffered a loss, because of an excavation-related incident to recover damages in a civil suit. The right to pursue those actions is a right separate and apart from enforcement actions taken by the Board. Therefore, as a matter of policy, the Board will not seek restitution for individuals.

For an education-first approach consistent with the Board's Enforcement Philosophy (Policy B-05) to work, the Board needed to create a requirement that would allow it to be notified of accidents in a timely fashion so that it would be able to investigate them. To leave reporting as a voluntary action would only serve to allow parties to extort each other for damages or face referral to the Board—a situation inconsistent with the Enforcement Philosophy.

The Board therefore adopted a regulation to require excavators to notify the one-call center within two hours (who would in turn transmit the notification to the Board) under one of the following conditions:³⁵

1. Damage to natural gas or hazardous liquid pipeline subsurface installation
2. Damage to high priority subsurface installation of any kind
3. Damage causing injury that requires treatment at a facility that provides medical services
4. Damage causing fatality

These reporting requirements cover an estimated 5,000 damages a year, and are expected to be in force January 1, 2020.

³⁵ Section 4100(a) of Title 19 of the California Code of Regulations (pending)

Accident Notification

In addition, the Dig Safe Act of 2016 placed restrictions on persons seeking civil action to recover damages if that person also filed a complaint with the Board. In a clear effort to allow the Board to finish an investigation, and to mitigate the use of a complaint as leverage in seeking damages, the Legislature prohibited a complainant from filing a civil claim until the Board has finished its investigation, or six months, whichever came first. If a complainant then chooses to file a civil action against a person the Board determined did not violate the One Call Law, the complainant must also notify the Board when the action is filed.³⁶

Complaints

Persons may file complaints electronically through the same portal in which they report damages.³⁷ Complaints will be addressed in one of two manners. If the complaint raises to a level that merits an investigation (discussed below), the complaint will be investigated just as a similarly-merited damage report would. If the complaint does not meet that threshold, the complainant will be provided the contact information for the appropriate person in the organization they are complaining against. In the experience of Board members and staff, most people filing a complaint are looking for immediate resolution, such as a contractor trying to get a locator to mark his or her work site. They are rarely interested in seeing the Board pursue an investigation of many months. To facilitate referrals, staff will compile, maintain and update a list of management level company personnel from industry stakeholders.

The Board encourages the reporting of one call violations by whistleblowers. “Confidential” reporting and “anonymous” reporting are not synonymous, and each has benefits and drawbacks. Anonymous reporting allows the reporter confidence that he or she will not be identified and thus not subject to ostracism or retaliation, but such reports are difficult to pursue, as an investigator cannot reach the reporter to ask follow-up or clarifying questions. Confidential reporting allows an investigator to follow up and obtain additional information as needed. When a reporting party makes a request to remain confidential, the request will be noted in the file and staff will make every effort to accommodate the request to the extent permitted by law. If a Board investigator does not have sufficient evidence to

³⁶ Gov't Code 4216.21

³⁷ DigAlert received a \$70,000 Pipeline and Hazardous Materials Safety Administration grant to develop a portal for Dig Safe Board damage reporting.

propose enforcement action without the testimony of a complainant who wishes confidentiality, the investigator will not be able to pursue the case and the investigation will be closed. In practice, this means that a complainant wishing to remain confidential must provide investigators with enough independently-verifiable information for the investigator to perform an independent investigation.

Board investigators will prioritize investigating both damage reports and complaints using the following four categories:

- **Consequence** (injury, fatality and disruption)
- **Public Interest** (news worthy, visibility, proximity to locations of interest such as schools, etc.)
- **Policy** (those issues of policy importance to the Board, such as power tool use in the tolerance zone)
- **Workload** (the extent to which investigative resources are already committed)

As the Board is focused on safety and not on assisting in facilitating restitution, both damage reports and complaints will be judged against these criteria to determine which notifications to pursue as investigations.

Given the Board's focus on safety issues, neither damages nor complaints have a greater weight *a priori*; rather, the determination as to whether to conduct an investigation depends on the facts of the incident. This determination is made by the investigators without involvement by the Board members or the Executive Officer.

The Dig Safe Board hired experienced investigators who have received basic investigator training in their previous positions. For this reason, the Dig Safe training plan focused on investigator safety on location, investigative procedures, and Gov't Code 4216 *et seq.* The entire investigative team has attended the required 24 hours Hazardous Waste Workers' Health and Safety Training (HAZWOPER), completed various state mandated trainings, conducted ride-a-longs with operators, and attended training related to Gov't Code 4216 *et seq.* In total, the investigation's team has completed approximately 1600 hours of training.

Investigation Prioritization

Investigator Training

Table 8: 2019 Investigator Training	Location	Date Complete
OSHA TRAINING INSTITUTE AND EDUCATION CENTERS-SAFETY FEST	Dublin	3/11/2019
RIDE-A-LONG AT&T	Sacramento	2/6/2019
811 CALL CENTER TOUR	Concord	2/20/2019
RIDE-A-LONG WEST VALLEY CONSTRUCTION	Stockton	2/22/2019
RIDE-A-LONG CITY OF SACRAMENTO UTILITIES	Sacramento	3/11/2019
RIDE-A-LONG SACRAMENTO SUBURBAN WATER DISCRICT	Sacramento	3/13/2019
HAZARDOUS LIQUID PIPELINE SAFETY SEMINAR	Long Beach	4/18/2019
SRBX SAFETY EXPO	Sacramento	4/18/2019
UNDERGROUND ECONOMY TASKFORCE MEETING	Sacramento	4/23/2019
HAZARDOUS MATERIALS INCIDENT COMMANDER	Tracy	5/30/2019
TOUR OF PG&E GAS SAFETY ACADEMY	Winters	6/13/2019
CSTI HAZARDOUS MATERIALS INVESTIGATIONS TRAINING	San Luis Obispo	6/21/2019
SMUD/PG&E SAFE EXCAVATION OUTREACH EVENT	Sacramento	3/15/2019
TRAIN THE TRAINER BUILDING TRADES EXCAVATION SAFETY TRAINING	Sacramento	3/27/2019
UNDERGROUND ECONOMY TASKFORCE MEETING	Sacramento	4/23/2019
SUPERVISORY TRAINING PART 1 and Part 2	Sacramento	4/10/2019
UNDERGROUND ECONOMY TASKFORCE MEETING	Sacramento	5/29/2019
ENV. TRAINING AND COMPLIANCE HAZ. WASTE WORKERS' H&S TRAINING	Anaheim	6/5/2019
TRAINING FOR TRAINERS	Sacramento	10/4/2019
BODY LANGUAGE AND TACTICAL COMMUNICATION	Santa Rosa	9/18/2019
HAZMAT FIRST RESPONDER OPERATIONS TRAINING	ONLINE	5/17/2019
DEFENSIVE DRIVER TRAINING	ONLINE	Various
OSHA 10-HOUR OUTREACH-CONSTRUCTION INDUSTRY EHS Inc.org	Irvine	11/15/2018
INFORMATION SECURITY AWARENESS	ONLINE	Various
SECURITY AWARENESS;HUMAN FIREWALL	ONLINE	Various
CAL FIRE CODE OF CONDUCT PO 227	ONLINE	Various
CAL FIRE EEO HARASS. PREVENTION SUPERVISOR AND MGR TRAINING	ONLINE	7/3/2019
CAL FIRE FOCUS ON SAFETY 2019	ONLINE	Various
CAL FIRE VEHICLE ACCIDENT REPORT 2018	ONLINE	Various
SO CAL GAS RIDE ALONG	Downey	3/4/2019
PG&E D.I.R.T RIDE ALONG	Numerous	Various
CARCGA PRESENTATION DIG/ALERT	Irvine	8/9/2019
LOCATION MARKING TRAINING	Ventura	Various
AT&T RIDE UNDERGROUND VAULT TOUR AND TRAINING	Sacramento	7/19/2019
CSLB SWIFT TEAM RIDE ALONG	Butte County	9/12/2019

Board investigators have initiated 207 formal investigations since beginning investigations in early 2019. Of these, 182 investigations have been completed. Thus far, all investigations closed have been closed within 90 days.

Investigation Statistics

Table 9: Investigation and Enforcement Statistics	
	CY 2019
INVESTIGATION	
All Investigations	207
First Assigned	207
Closed	182
Average days to close	30-60 days
Pending	25
Desk Investigations	163
Closed	156
Average days to close	30-60 days
Pending	7
Investigations Initiated by Complaint	2
COMPLIANCE ACTION	
Advisory Letters Sent	Pending
Notices of Probable Violation	0

Performance targets, as companies like Pacific Gas and Electric and Wells Fargo will attest, are a double-edged sword. Branch managers at Wells Fargo for the numbers and types of products sold, leading some employees to open new accounts, issue debit and credit cards without customer knowledge, and in some cases forge customer signatures.³⁸ PG&E, in its drive for zero late locate and mark tickets, allowed, as the Public Utilities Commission's Safety and Enforcement Division alleges, the company to undercount late tickets in the years 2012 to 2016 by tens of thousands.³⁹

Enforcement Proceedings

Board Sets No Performance Targets

³⁸ Brian Tayan, "The Wells Fargo Cross-Selling Scandal," Stanford, 2019, p. 2.

<https://www.gsb.stanford.edu/sites/gsb/files/publication-pdf/cgri-closer-look-62-wells-fargo-cross-selling-scandal.pdf>

³⁹ "Investigative Report into the Operations and Practices of Pacific Gas and Electric Company's Damage Prevention and Locate and Mark Programs," Public Version, Safety and Enforcement Division, California Public Utilities Commission, 2018.

The Board does not use commonly-encountered performance goals for investigations, such as numbers of investigations completed, number of Notices of Probable Violation issued, or number of favorable judgements because the Board's goals are not so simple as the metrics. Yes, the Board wants to enforce against violators, but it also wants to educate those ignorant of the law. Yes, investigations lead to enforcement actions, but they also provide important data and narratives to help drive policy efforts. Additionally, performance targets can lead to perverse incentives, such as choosing to investigate incidents that are simpler or closer in proximity rather than based on a policy rationale.

Rather than set overarching performance targets for investigators, evaluation of investigator performance is undertaken at the individual level by an investigator's supervisor.

Notice of Probable Violation

In many cases, Board investigators will determine that a One Call Law violation was unintentional and can be corrected by simply sending the violator an advisory letter. On the other hand, when Board investigators identify through their investigations a violation that merits a corrective action or financial penalty, the Investigations Division will serve the person found to have violated the One Call Law with a Notice of Probable Violation (NOPV). This NOPV will start the enforcement process.⁴⁰

Respondents have the following options in response to an NOPV:

1. No Contest: Contest neither the violation nor the proposed penalty.
2. Written Response: Contest the violation, penalty, or both through a written response.
3. Informal Hearing: Contest the violation, penalty, or both before the Board during a Board meeting.
4. Formal Hearing (Board jurisdiction) or Forward Case to Jurisdictional Body (CSLB, CPUC, OSFM, or local gov't jurisdiction): Persons under Board enforcement jurisdiction have the option for a formal hearing before an Administrative Law Judge at the Office of Administrative Hearings. The Board will not provide a

⁴⁰ Sections 4200 to 4258 of Title 19 of the California Code of Regulations (pending)

formal hearing to an actor under a different enforcement jurisdiction, so the respondent may go straight to that body.

Regardless of the choice the respondent makes, and regardless of the enforcement jurisdiction the respondent is under, the Board will make a decision on all cases in which an NOPV is issued. If the Board chooses to recommend enforcement to the Contractors State License Board, the Public Utilities Commission, the Office of the State Fire Marshal, or a local governing body, the investigation and the Board's decision will be forwarded to that agency.

Government Code 4216.19(e) provides that penalties imposed by the Board shall be graduated, and may include notifications, information letters, direction to undergo education, and financial penalties. In selecting the appropriate penalty, statute requires the Board to consider certain factors:

- Type of the violation;
- Gravity of the violation;
- Degree of culpability;
- History of violations by the cited party;
- Work performed without violations;
- Efforts taken to prevent the violation; and
- Efforts taken to mitigate the effects of the violation.

In keeping with the statute's remedial emphasis, the Board has adopted an enforcement philosophy that considers the value of information, training, policy changes, and organizational culture changes in incentivizing safer practices (Policy B-05, adopted in Resolution 19-01-02). The Board is in the final stages of adopting regulations⁴¹ which permit the imposition of orders for corrective action requiring:

- Completion of education courses;
- Repair and testing of facilities or equipment;
- Changes to management processes;
- Changes to operational procedures and practices; and
- Updates to geographic information systems data.

Penalty Considerations

⁴¹ Section 4201 of Title 19 of the California Code of Regulations (pending)

The same regulation also provides that the Board may impose monetary penalties up to the maximum amounts permitted by statute. By regulation, the Board has clarified the manner in which the statutory penalty factors are to be applied in determining the appropriate penalty. That clarification provides that:

- (1) The gravity of a violation is measured by the risk of, or occurrence of, injuries, death, or damage to property or the environment.
- (2) The degree of culpability may be reduced where intervening acts or omissions contributed to the event.
- (3) Factors to be considered in mitigation may include whether the violator contacted emergency response authorities immediately after the damage occurred, and whether the violator cooperated with investigating agencies.

In this respect, the Board's statutory direction is similar to that of the Real Estate Commissioner, who must also consider factors such as the gravity of the violation, the good faith of the person cited, and the history of previous violations. (Bus. & Prof. Code § 10080.9(a).)

Investigation and Enforcement Timeline

The length of a typical Board investigation is from 10 – 60 days, but is dependent on the nature of the incident and the cooperation of the parties involved. If the investigative findings warrant the issuance of a Notice of Probable Violation, the respondent would have 30 business days to respond. If the respondent requests a hearing, the public meeting shall be held no longer than 60 business days from the date of the Board's receipt of the request. The Board would have no longer than 45 business days to adopt a written decision or recommendation. The expected timeline to complete an investigation and corresponding Board action would therefore be between 100 – 195 business days.

Furthermore, the majority of the Board's actions will be referrals to the Contractors' State Licensing Board, the Public Utilities Commission, and the Office of the State Fire Marshal, each of whom operate on their own enforcement timelines. The Board will monitor the cases referred to these enforcement agencies, but it has no control over their timelines.

The Board expects to begin referring violations to other state agencies for enforcement in early 2020 and will begin direct enforcement actions on July 1, 2020. While the role of settlements in the Board's enforcement is unknown, certain factors make it unlikely that settlements will be considered.

Settlements Unlikely to Play a Role

When the Board cites subjects that are within the enforcement jurisdiction of other agencies, settlement will be unlikely. In those cases, the Board decides (1) whether to refer that subject to the enforcing agency, and (2) what penalty to recommend. The nature of the decision to refer makes it unsuitable for settlement. And when a referral is made, we anticipate that the subject will engage in settlement discussions with the enforcing agency rather than the Board.

However, we expect that in cases enforced directly by the Board, subjects may propose settlement options. In those cases, the Board will need to decide whether to impose a remedial action or a monetary penalty. A remedial action may be an order to attend a training course, or an order directing some corrective action in a company's practices, policies, or priorities. A subject contesting a citation will likely address considerations related to the appropriate penalty, and some subjects will make settlement proposals. Because the Board will hear appeals and will deliberate during open sessions, those discussions will occur during open session.

As an overarching principle, however, settlements tend to have less value in addressing safety issues than they do in mediating financial agreements, and so they will unlikely play a significant role in Board actions.

In developing its investigation program, the Board has put an emphasis on timely completion of investigations. Experience indicates that, for routine incidents, the Board will be able to complete investigations and make referral decisions within 6 months of the incident. In the case of a referral with enforcement recommendation to Contractors State License Board, Public Utilities Commission, and the Office of the State Fire Marshal, the Board expects those agencies to have sufficient time to evaluate and initiate actions.

Statutes of Limitation

The statutes authorizing the Board to take direct enforcement action do not specify a statute of limitations.

However, enforcement of the Board's harshest remedy, imposition of civil penalties, is subject to the one-year limitation period established by Code of Civil Procedure section 340(b), which provides:

"Within one year:

"(b) An action upon a statute for a forfeiture or penalty to the people of this state."

The civil penalties are authorized by Government Code section 4216.6(a) and are enforced through a civil action brought by the Attorney General, or appropriate local agency, in the name of the people of the State of California. The amount of a penalty may not exceed \$10,000 for a negligent violation, and may not exceed \$50,000 for a knowing and willful violation.

The penalties are not restitution or compensation for damages. And there's no correlation between the amount of a penalty and the amount of any damages caused by the violation. The penalties are assessed because the violation occurred. For that reason, the actions are not governed by the three-year limitations period specified in Government Code section 338(a) (An action upon a liability created by statute, other than a penalty or forfeiture).

As investigations are expected to be completed within 6 months, the Board does not expect cases to lack enforcement because of a failure to meet a statute of limitations.

Recovery of Penalties Assessed

The Board has statutory authority to impose civil penalties on operators or excavators who fall within the Board's direct enforcement jurisdiction. The maximum amount of the penalty is \$10,000 for a negligent violation, and \$50,000 for a knowing and willful violation. Those penalties are recoverable in a civil action brought by the Attorney General, a district attorney, or an agency that issued the construction permit.

The Board's authority to enforce the payment of penalties differs from the authority of boards and commissions within the Department of Consumer Affairs. For example, if a practitioner before the Osteopathic Medical Board does not pay an administrative fine, the Board may impose a disciplinary action for the non-payment, and will not renew

the practitioner's license until the fine is paid. (Bus. & Prof. Code § 125.9(b)(5).) Where a fine imposed by the Real Estate Commissioner remains unpaid, the Commissioner may obtain a judgment against the offending party through a summary-type proceeding, (Bus. & Prof. Code § 10080.9(e)), and may refuse to renew a license. (Bus. & Prof. Code § 10080.9(f).) The Dig Safe Board, however, does not regulate professional licenses. And must initiate a civil action to obtain a judgment in the event of nonpayment. Alternatively, the Board may choose to use the Franchise Tax Board's intercept program to collect outstanding penalties.

In November 2018, the Dig Safe Board entered into a Memorandum of Understanding with the Contractors State License Board. The MOU sets forth the parties' commitment to collaborate to increase public safety through sharing guidelines to support investigation and enforcement processes and maximize parties' respective resources. As a result, Board investigators have shadowed the Department of Consumer Affairs Contractors State License Board's State Wide Investigative Fraud Team (SWIFT) and have been asked to participate in joint investigations with them.

Board investigators regularly attend the Underground Economy Task Force meetings. These meetings are inter-agency events where California Department of Insurance, Department of Industrial Relations, Employment Development Department, Division of Labor Standards Enforcement, Contractors State License Board, State Compensation Insurance Fund, and others participate in round table discussions regarding the underground economy and current enforcement efforts.

Underground Economy

Trends and Issues

Through their initial investigations, Board investigators have identified these as a Top 5 Safety Issues in the industry.

Top 5 Safety Issues

No Ticket	Excavators not calling to get a ticket prior to excavation for various reasons.
<i>Reasons:</i>	<ul style="list-style-type: none"> • Ignorance of the Law • Hiring Uniformed/Unlicensed Contractors • No Need to Call, Worked in Area Before • Do Not Consider Work to be Excavation • Municipalities Working on Their Own Utilities
Abandoned Lines	Unknown underground utilities create a variety of safety concerns.
<i>Safety Concerns:</i>	<ul style="list-style-type: none"> • In Many Instances No One Claims Utility • Operators Don't Have Records or Make Records Available to Excavator • If Operators Do Have Maps, Many Are Outdated • Excavators Are Told to Cover Up the Utility by the Operators
Old or Damaged Locate Marks	Utility locate marks, like paint on the ground, indicate the location of a facility, but if old or damaged can cause issues in the field.
<i>Safety Issues:</i>	<ul style="list-style-type: none"> • Marks are Unclear • Excavator Didn't See Covered Marks • Excavator Requested New Marks but is Told Marks are Sufficient by Operator • If Marks are Unclear to Excavator, They Need to Request New Marks Before Digging
Power Tools in the Tolerance Zone	Excavators are using power tools in the tolerance zone to expose utilities to save time and money which can jeopardize safety.
<i>Reasons:</i>	<ul style="list-style-type: none"> • Some Excavators Say Soil Type is a Factor in Their Decision to Use Power Tools in the Tolerance Zone to Expose Utilities
Failure to Report Damages or Incidents	It is not a requirement to call 811 to report damages, and because of this many damages go unreported which can jeopardize safety
<i>Safety Concerns:</i>	<ul style="list-style-type: none"> • Excavators Work Out a Settlement with the Utility and Do Not Report Damage to 811 • Limits the Parties that Have Knowledge of the Damage

Factors Affecting Number of Investigations Undertaken

As the Board has only been investigating incidents since May of 2019, there is a limited amount of enforcement data from which to draw conclusions. However, as complaints and damage notifications begin to be routed through the one-call centers, the Board expects an increase in the volume of potential investigations. The investigations case management system, expected to be in place during the second quarter of 2020, will allow damage notifications to be processed by investigators in “real time”. The amount of safety interventions investigators will be able to make will be directly proportional to the size of the investigations staff.

Other factors affecting the ability for investigators to investigate damages include:

- Tracking of Board-mandated corrective actions
- Support of formal and informal hearings before both the Board and the agencies to whom the Board refers enforcement recommendations
- Education activities, such as teaching classes mandated through Board action
- Ability to get to incidents across a wide geographic area

Issues

While the new Board has managed to accomplish a great deal in its first two years of operation, several issues restrict the Board from meeting statutory mission.

In addition to the strategic objectives identified in its annual plans, the Board has a strong commitment to education and outreach that touches all aspects of its work from rulemaking and standards development, to investigations, enforcement, data analysis, and, of course, the development and implementation of its education program.

To fulfill these commitments, the Board hired a dedicated Education and Outreach Officer, and an Investigations Division. The Board's twelve investigators are responsible for examining dig-in accidents and violations of the state's one-call law, acting as education ambassadors to violators encountered during their investigations, and recommending enforcement actions to the Board that range from education and corrective action to financial penalties.

The information gathered through investigations will provide insight into existing education and outreach needs, while any financial penalties levied against violators will fund the Board's future education and outreach efforts. The Board has one position dedicated to education and outreach. The Education and Outreach Officer is responsible for identifying areas where additional education and outreach is needed, coordinating existing education and outreach efforts among the Board's varied stakeholders, and implementing the Board's current education and outreach plan.

However, as the Board's enters its third year of operations it has become increasingly clear that current resources are not sufficient to meet the education and outreach requirements as prescribed in the Dig Safe Act of 2016. The Board is a unique regulatory body that does not work with one type of stakeholder but works with a variety of industries from road builders to farmers to public works departments to telecommunications giants all requiring different needs. Understanding the needs of each industry and creating safety lessons tailored to each group takes time and resources. This is the main challenge to the Board's success in implementing the 2019-2020 education and outreach

Issue 1: Board Education Resources Insufficient to Meet its Charge

objectives, established to not only meet the Board's Legislative requirements but to carry out its mission (Policy B-02) to improve public and worker safety. The activities identified as necessary to implement these objectives (see Error! Reference source not found.) illustrate the extent to which education and outreach are fundamental to almost every Board strategic activity.

Table 10: Detailed Timeline Showing the Board's Education and Outreach Implementation Needs as They Pertain to the Strategic Activities Outlined in the 2019 Plan.

Education and Outreach Implementation Needs Timeline																											
OBJECTIVE	2019												2020														
	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D			
Area of Continual Excavation																											
Flood Control (FC) District Outreach																											
Create Standard Ag Presentation																											
Create Standard FC Presentation																											
Create Ag Educational Materials																											
Create FCI Educational Materials																											
Ag Outreach & Presentations																											
FC Outreach & Presentations																											
Create Website Resources Page																											
Outreach Expansion Research																											
Education and Enforcement																											
Create and Distribute Intro Letters																											
Education Course Development																											
Phase One: Case Study Videos																											
Phase Two: Curriculum Development																											
Phase Three: Course Logistics																											
Phase Four: Present to the Board																											
Phase Five: Course Beta Testing																											
Phase Six: Course Goes Live																											
Create Investigations Presentations																											
Create Investigations Materials																											
Create Website Resources Page																											
Relevant Safety Events																											
Outreach Expansion Research																											
Continual Learning																											
Reasonable Care Standards																											
Public Workshops																											
Stakeholder Surveys																											
Targeted Outreach Research																											

expects that other sub-types of excavators similarly fall through the cracks when it comes to participation in one-call notification. To be proactive rather than just reactive, the Board is obligated to identify excavator groups most in need of fundamental safety and compliance education, particularly those actors who do not call in tickets. However, the Board does not have the ticket data, nor the processing tools required to explore these questions.

Multiple fields on a ticket speak to the type of excavation work being performed and the excavator using the one-call service. The “excavator” field denotes the company that is calling in the ticket, while the “work type” field describes the work being performed. Another field, called “work for,” indicates a subcontractor relationship. Subcontractor relationship patterns can provide another piece in the puzzle of what industries use the one-call service.

These data points are found in the approximately two million tickets submitted annually in California. To process and manage that volume of inbound data, the Board would need to purchase or subscribe to a ticket management system (TMS). With this information, the Board can determine who is and is not calling in tickets by analyzing economic, industry, and land-use information to understand what companies should be showing up on tickets. If companies do not appear at the levels predicted, that is likely an indication of an excavator group that lacks awareness of one-call laws. Electricians, plumbers, HVAC installers, concrete and hardscape specialists, carpenters, fencers, irrigation installers, and landscapers are examples of less obvious excavator types the Board expects should be—but may not be—calling in tickets.

The volume of annual tickets, with each ticket containing several informative data points, would generate a robust dataset to inform the Board’s education and outreach efforts by identifying who to target.

Just as important, a TMS with access to ticket data would also provide the Board with a powerful tool for understanding the effectiveness of educational campaigns, delivering snapshots of one-call participation, which can be monitored over time.

Issue 3: Cost Focus **Undercuts Needed** **Changes in a** **Fractured and** **Technologically** **Lagging Industry**

Several changes are hitting the one-call process concurrently, changes which have increased the costs to the infrastructure owners, who direct the one-call centers. These changes include one-call center technology upgrades (especially at USA North), one-call center business processes (especially at USA North), policy advancements created by the Dig Safe Act of 2016 and the Dig Safe Board, the Dig Safe Board's fee, electronic positive response requirements, and a skyrocketing ticket volume caused by a strong economy and changes in business practices that have led some companies to call in a greater number of smaller tickets.

As subsurface infrastructure owners oversee the one-call centers, they are the ones who determine the details of the notification process—how large tickets can be, hours of operation, what information excavators are able to put on a ticket, whether to encourage notification through the telephone or the website, etc. That cost concerns would play a factor in one-call center decisions is understandable and proper, but too much of a focus on cost has the potential to retard the implementation of state policy.

The Board is not concerned about the cost burdens placed on the largest of one-call center members, as infrastructure, for them, is generally a core element of their businesses, and their size allows them to manage both their budgets and their cash flows. On the other hand, mid-sized operators—such as cities and their public works departments—are furthest behind the technology curve and will have their operations and budgets hit hardest by the electronic positive response requirements of AB 1166. The management of these operators may pressure their employees who sit on one-call center boards to reduce costs below what is sufficient to maintain effective operations and support state safety policy.

This pressure could be relieved by a couple of means. The one-call center membership fees are slightly regressive and could be adjusted so that the largest members pay an increasing share of the costs. Additionally, the state could charge a nominal fee for excavators, perhaps attached to a relevant permit, to offset the cost of Board operations, which could allow excavators—from whom the Board has had difficulty in eliciting participation—to feel greater ownership of Board processes. Statute appropriately prohibits charging excavators to obtain a ticket for the one-

call center, as to not discourage anyone from using the service, so any fee would need to adhere to this principle.

Issue 4: Safety and Liability Have Begun to Part Ways

The Board's brief experience belies how liability is often a more powerful force than safety in shaping how people work around buried infrastructure. Generally speaking, safety and liability tend to be aligned in American jurisprudence, where the incentives for employers to promote worker safety and to limit financial exposure lead to consistent actions. In an environment where responsibility for safety is shared between employers who have no contractual relationship, one can limit exposure by either promoting safety or pushing liability to other employers. Many subsurface installation owners contract out damage claims to collection agencies. Multiple excavators made statements during the course of workshops, surveys, and public comments to the effect that it didn't matter the reasons, if they damaged a facility, they'd be held financially accountable.

The state has a large share of responsibility in creating this environment. Rather than assign a regulatory body to oversee safety, previous legislatures used Gov't Code § 4216.7 to codify flow charts of responsibility in ways usually reserved for the courts. Courts are generally better at determining liability as they, unlike statute, are able to look at the totality of facts in a specific case and apportion liability according to the facts. Statutory liability provisions, on the other hand, allow parties to hit each other over the head with claims rooted in statutory interpretation rather than facts. This condition existed for more than a quarter of a century before the Legislature created the Dig Safe Board, so a culture of liability has become entrenched.

Many interested parties are highly invested in maintaining statutory provisions clarifying liability. The Board's commitment toward creating a culture of safety has been well-received, but presently—at the outset of its journey—it has not yet demonstrated that safer, fairer outcomes may be obtained through Board investigations and regulation than through the well-established liability provisions of Gov't Code § 4216.7. In many ways, those provisions are part of the state's regulatory infrastructure, and they leak. The Board is not prepared to make a recommendation to the Legislature to strike Gov't Code § 4216.7 and revert liability decisions to the courts, but those provisions conflict with the

Board's "traffic circle" approach of shared responsibility,
and they may be approaching the end of their useful life.

Publications

The following are the Board's publications in reverse chronological order. Hyperlinks are used to direct the reader to the document. In case of broken links, please contact the California Dig Safe Board at the Office of the State Fire Marshal at (916) 568-3800 or contact us online at <https://digsafe.fire.ca.gov>.

2019-20 Education & Outreach Plan, October 7, 2019

<https://digsafe.fire.ca.gov/media/2266/item-3-education-and-outreach-plan.pdf>

2019 Cost Report, February 14, 2019

<https://digsafe.fire.ca.gov/media/1954/dig-safe-board-2019-cost-report.pdf>

Second Annual Report to the Governor and Legislature, February 1, 2019

<https://digsafe.fire.ca.gov/media/2141/dig-safe-board-second-annual-report.pdf>

2019 Plan, January 9, 2019

<https://digsafe.fire.ca.gov/media/2097/dig-safe-board-2019-plan.pdf>

2018 Results Report, January 9, 2019

<https://digsafe.fire.ca.gov/media/2096/dig-safe-board-2018-results-report.pdf>

First Annual Report to the Governor and Legislature, February 1, 2018

<https://digsafe.fire.ca.gov/media/2140/dig-safe-board-first-annual-report.pdf>

2018 Plan, January 9, 2018

<https://digsafe.fire.ca.gov/media/1979/dig-safe-board-2018-plan.pdf>

Attachments

For documents posted online, hyperlinks are used to direct the reader to the document. In case of broken links, please contact the California Dig Safe Board at the Office of the State Fire Marshal at (916) 568-3800 or contact us online at <https://digsafe.fire.ca.gov>.

Attachment 1: Materials, Publications, and Media Attention

Attachment 2: Organizational Charts

Attachment 3: Staff Report: "Discussion on Area of Continual Excavation Ticket Renewal Requirement (Government Code section 4216.10(e)), February 12, 2019
<https://digsafe.fire.ca.gov/media/2100/agenda-item-10-area-of-continual-excavation-renewal-ticket-requirement.pdf>

Attachment 4: Staff Report: "Discussion on Area of Continual Excavation Ticket Renewal Requirement (Government Code Section 4216.10(e)), April 15-16, 2019
<https://digsafe.fire.ca.gov/media/2046/item-6-area-of-continual-excavation-renewal-ticket-requirement.pdf>

Attachment 1

An overview of the Board’s work to create awareness about its existence, its mission, and its work to create regulations, policies, and standards from January 1, 2018 to Present. This section is broken down into four sections:

Materials, Publications & Media Attention

Name	Date Published	Brief Description	Audience Targeted
2018 Plan	01/2018	Report acts as a guide for the Board’s activities and decisions throughout the year by outlining the work planned to meet the Board’s strategic goals.	Lawmakers, Stakeholders, and the Public
First Annual Report to the Governor & Legislature	02/2018	Report provides an overview of the Board’s Results Report and Annual Plan, and is required by all state agencies per GOV 10231.5.	Lawmakers & Stakeholders
“O” Magazine Article	01/2019	Article featured an interview with Member Del Toro in which she discussed the Board and its safety mission.	Members of the Public
“Entrepreneur” Magazine Article	01/2019	Article featured an interview with Member Del Toro in which she discussed the Board and its safety mission.	Members of the Public
2018 Results Report	01/09/2019	Report details the work done by the Board in 2018, and includes the activities performed to execute the Board’s annual plan.	Lawmakers, Stakeholders, and the Public
2019 Plan	01/09/2019	Report acts as a guide for the Board’s activities and decisions throughout the year by outlining the work planned to meet the Board’s strategic goals.	Lawmakers, Stakeholders, and the Public

Name	Date Published	Brief Description	Audience Targeted
2019 Cost Report	01/15/2019	Report discusses the Board's projected expenses, which are funded by a fee paid by members of the one-call centers.	One-Call Center Members, Stakeholders, and the Public
2018 Plan	01/2018	Report acts as a guide for the Board's activities and decisions throughout the year by outlining the work planned to meet the Board's strategic goals.	Lawmakers, Stakeholders, and the Public
First Annual Report to the Governor & Legislature	02/2018	Report provides an overview of the Board's Results Report and Annual Plan, and is required by all state agencies per GOV 10231.5.	Lawmakers & Stakeholders
"O" Magazine Article	01/2019	Article featured an interview with Member Del Toro in which she discussed the Board and its safety mission.	Members of the Public
"Entrepreneur" Magazine Article	01/2019	Article featured an interview with Member Del Toro in which she discussed the Board and its safety mission.	Members of the Public
2018 Results Report	01/09/2019	Report details the work done by the Board in 2018, and includes the activities performed to execute the Board's annual plan.	Lawmakers, Stakeholders, and the Public
2019 Plan	01/09/2019	Report acts as a guide for the Board's activities and decisions throughout the year by outlining the work planned to meet the Board's strategic goals.	Lawmakers, Stakeholders, and the Public
2019 Cost Report	01/15/2019	Report discusses the Board's projected expenses, which are funded by a fee paid by members of the one-call centers.	One-Call Center Members, Stakeholders, and the Public

Name	Date Published	Brief Description	Audience Targeted
2018 Plan	01/2018	Report acts as a guide for the Board's activities and decisions throughout the year by outlining the work planned to meet the Board's strategic goals.	Lawmakers, Stakeholders, and the Public
First Annual Report to the Governor & Legislature	02/2018	Report provides an overview of the Board's Results Report and Annual Plan, and is required by all state agencies per GOV 10231.5.	Lawmakers & Stakeholders
"O" Magazine Article	01/2019	Article featured an interview with Member Del Toro in which she discussed the Board and its safety mission.	Members of the Public
"Entrepreneur" Magazine Article	01/2019	Article featured an interview with Member Del Toro in which she discussed the Board and its safety mission.	Members of the Public
2018 Results Report	01/09/2019	Report details the work done by the Board in 2018, and includes the activities performed to execute the Board's annual plan.	Lawmakers, Stakeholders, and the Public
2019 Plan	01/09/2019	Report acts as a guide for the Board's activities and decisions throughout the year by outlining the work planned to meet the Board's strategic goals.	Lawmakers, Stakeholders, and the Public
2019 Cost Report	01/15/2019	Report discusses the Board's projected expenses, which are funded by a fee paid by members of the one-call centers.	One-Call Center Members, Stakeholders, and the Public
Second Annual Report to the Governor & Legislature	02/01/2019	Report provides an overview of the Board's Results Report and Annual Plan, and is required by all state agencies per GOV 10231.5.	Lawmakers & Stakeholders

Name	Date Published	Brief Description	Audience Targeted
"San Diego Grown" Magazine Article	03/2019	Article discussed the Board's area of continual excavation regulation development and the impact the requirements will have on farmers once they take effect.	Farmers
Dig Safe Board Fee FAQs	04/09/2019	Document answered frequently asked questions staff received from one-call center members once they started receiving their fee notices in February and March.	One-Call Center Members
Excavation Safety Guidelines for Wildfire Cleanup	04/11/2019	Document discussed guidelines for safe excavation during disaster cleanup, and addressed delineation requirements, the need to call 811 prior to excavation, who is required to have a ticket, and the importance of communicating with utility operators.	Contractors and Subcontractors
"American Society of Safety Professionals Journal" Article	06/2019	Article featured an interview with Member Del Toro in which she discussed the Board and its safety mission.	Safety Professionals
Fox 5 San Diego Web Article	06/18/2019	The Dig Safe Board was featured in an article the station's website that discussed SDG&E's push to get homeowners and construction crews to call 811 prior to digging and included information about the newly formed Dig Safe Board, and the enforcement measures that will begin July 1, 2020.	Public
KABC Los Angeles Saturday Morning News and Website	08/10/2019	On August 10, 2019 KABC Aired an interview with the Board's Chief of Investigations, discussing the importance of excavation safety and information about the Board.	Public

Regulation & Standards Development

Regulation or Standard	Type of Outreach	Date of Outreach	Brief Description	Audience Targeted
Board Fee	Webinar	05/2018	Public webinar discussed proposed regulations, how the fee would be calculated, and what the money collected would be used for.	One-Call Center Members
Board Fee	Outreach	06/2018	The Board sent notification of the fee rulemaking via email to the members of the one-call centers	One-Call Center Members
Area of Continual Excavation	Workshop	07/2018	The Board held a workshop with farmers and utility owners in Bakersfield to observe daily farming practices and discuss the current onsite meeting process.	Farmers & Utility Owners
Area of Continual Excavation	Outreach	08/2018-09/2019	Staff conducted outreach via phone and email to utility owners of various types to learn more about the onsite meeting process, and discuss the potential use of a standard form	Utility Owners
Area of Continual Excavation	Survey	09/2018-10/2018	The Board released a pair of surveys designed to receive further feedback from farmers and utility operators regarding the onsite meeting process.	Farmers & Utility Owners
Area of Continual Excavation	Presentations	10/2018	Throughout the month of October Board Members and staff traveled throughout the state to speak to farmers about the onsite meeting process and future ACE ticket requirements	Farmers

Regulation or Standard	Type of Outreach	Date of Outreach	Brief Description	Audience Targeted
Area of Continual Excavation	Expo	11/14/2018	Staff had a booth at the San Diego County Farm Bureau Agriculture and Nursery Expo to reach out to farmers about the future ACE Ticket requirements	Farmers
Reasonable Care	Stakeholder Engagement	08/2018-02/2019	The Board asked CARCGA's SSIP committee to provide their perspective on standards development regarding road grading.	Excavators, Operators, & Locators
AB 1914 Implementation	Surveys	03/2019-04/2019	Two surveys designed to solicit feedback from excavators and utilities regarding power tool use in the tolerance zone prior to positive location of underground facilities.	Excavators & Utilities
AB 1914 Implementation	Workshop	03/28/2019	Workshop held in Sacramento inviting open discussion regarding power tool use in the tolerance zone prior to positive location of underground facilities	Excavators & Utilities
Reasonable Care	Workshop	04/24/2019	Workshop held in Sacramento inviting open discussion regarding the Board's development of reasonable care standards for hand tool use in the tolerance zone and road grading activities	Excavators & Utilities
Area of Continual Excavation	Conversation Facilitation	06/18/2019	Board staff facilitated a conversation between a group of farmers and the one-call centers in Bakersfield regarding the area of continual excavation ticket format.	Farmers, One-Call Centers

Presentations, Meetings & Forums

Name	Type of Outreach	Date of Outreach	Brief Description	Audience Targeted
OSFM 2018 Pipeline Safety Seminar	Presentation	04/2018	Staff made a presentation at the Office of the State Fire Marshal's 2018 Pipeline Safety Seminar in Long Beach about the Board and its safety mission.	Utilities
Associated General Contractors Legislative Summit	Presentation	05/2018	Staff made a presentation at the Associated General Contractors Legislative Summit in Sacramento to educate the organization's members about the Board	Contractors
Utility Public Safety Alliance's Western Conference	Presentation	09/2018	Staff made a presentation at the UPSA Western Conference at SMUD in Sacramento providing the regulator's perspective as it pertains to safety around underground facilities	Utilities, Safety Professionals
SARBS of CWEA Winter Seminar	Presentation	01/30/2019	Member Del Toro made a presentation to members of the Santa Ana River Basin Section of the California Water Environment Association in Orange where she discussed the creation of the Dig Safe Board and its purpose and function to improve safety.	Excavators & Safety Professionals
2019 Safety Symposium	Presentation	02/07/2019	Staff made a presentation at the Safety Center's 2019 Safety Symposium regarding excavation safety in wildfire recovery areas.	Excavators, Utilities, & the Public

Name	Type of Outreach	Date of Outreach	Brief Description	Audience Targeted
OSFM 2019 Pipeline Safety Seminar	Presentation	04/18/2019	Staff made a presentation at the Office of the State Fire Marshal's 2019 Pipeline Safety Seminar in Long Beach about the Board and its safety mission.	Utilities
Kern Co. Farm Bureau Meeting	Presentation	04/18/2019	Member Voss made a presentation at the Kern County Farm Bureau updating farmers about the development of the Board's area of continual excavation regulations.	Farmers
2019 Spring Open Forum	Forum	04/01/2019-05/13/2019	Staff organized an open forum for Board stakeholders to ask questions, voice concerns, and share safety issues with the Board. The responses were discussed at the Board's May meeting in San Francisco	All Board Stakeholders
NAPSR Western Region Conference	Conference	04/15/2019-04/19/2019	Staff attended the National Association of Pipeline Safety Representatives Western Region Conference in San Diego. The annual conference is an opportunity for pipeline safety regulators from around the country to discuss damage prevention and how to better promote safety.	Safety Regulators
DigAlert Annual Meeting	Presentation	04/17/2019	Staff attended DigAlert's Annual Meeting in Corona to provide an update about the Board and answer any questions from the organization's members.	One-Call Center Members

Name	Type of Event	Date	Brief Description	Audience Targeted
LiUNA Underground Economy Enforcement Task Force Meeting	Networking	04/23/2019	Staff attended the Laborers' International Union of North America's Underground Economy Enforcement Task Force Meeting in Sacramento to network and share the Board's mission with its allied partners who share a common interest in safety.	Labor Union
USA North 811 Annual Meeting	Presentation	05/01/2019	Staff attended USA North 811's Annual Meeting in Concord to provide an update about the Board and answer any questions from the organization's members.	One-Call Center Members
LiUNA Underground Economy Enforcement Task Force Meeting	Networking	05/29/2019	Staff attended the Laborers' International Union of North America's Underground Economy Enforcement Task Force Meeting in Sacramento to network and share the Board's mission with its allied partners who share a common interest in safety.	Labor Union
CARCGA Meeting	Presentation	06/13/2019	Staff attended CARCGA's June in-person meeting in Winters to provide an update about the Board and answer any questions from the organization's members.	Excavators, Utilities, & Locators

Name	Type of Event	Date	Brief Description	Audience Targeted
LiUNA Underground Economy Enforcement Task Force Meeting	Networking	07/17/2019	Staff attended the Laborers' International Union of North America's Underground Economy Enforcement Task Force Meeting in Sacramento to network and share the Board's mission with its allied partners who share a common interest in safety.	Labor Union
DigAlert Board Meeting	Presentation	07/17/2019	Staff attended DigAlert's Board Meeting via phone to provide an update about the Board and answer any questions from the organization's members.	One-Call Center Members
USA North 811 Board Meeting	Presentation	07/31/2019	Staff attended USA North 811's Board Meeting in Concord to provide an update about the Board and answer any questions from the organization's members.	One-Call Center Members
CARCGA Meeting	Presentation	08/08/2019	Staff attended CARCGA's August conference call meeting via phone to provide an update about the Board and answer any questions from the organization's members.	Excavators, Utilities, & Locators
Senator Hill Field Office Visit	Presentation	08/22/2019	Staff visited Senator Hill's Field Office in San Mateo to provide a presentation about the Board's mission and role in improving safety in California.	Lawmakers

Name	Type of Event	Date	Brief Description	Audience Targeted
2019 Education & Outreach Meeting	Meeting	09/10/2019	Staff planned, executed, and organized the Board's Second Annual Education and Outreach meeting in Los Angeles. The meeting featured presentations, a workshop discussion about education and outreach needs, and a panel discussion on improving communication between excavators and utilities.	All Board Stakeholders
CARCGA Meeting	Presentation	10/10/2019	Staff attended CARCGA's October meeting in San Diego to provide an update about the Board and answer any questions from the organization's members.	Excavators, Utilities, & Locators
DigAlert Board Meetings	Presentation	10/16/2019	Staff attended Board Meeting via phone to provide an update about the Board and answer any questions from the organization's members.	One-Call Center Members

Events & Exercises

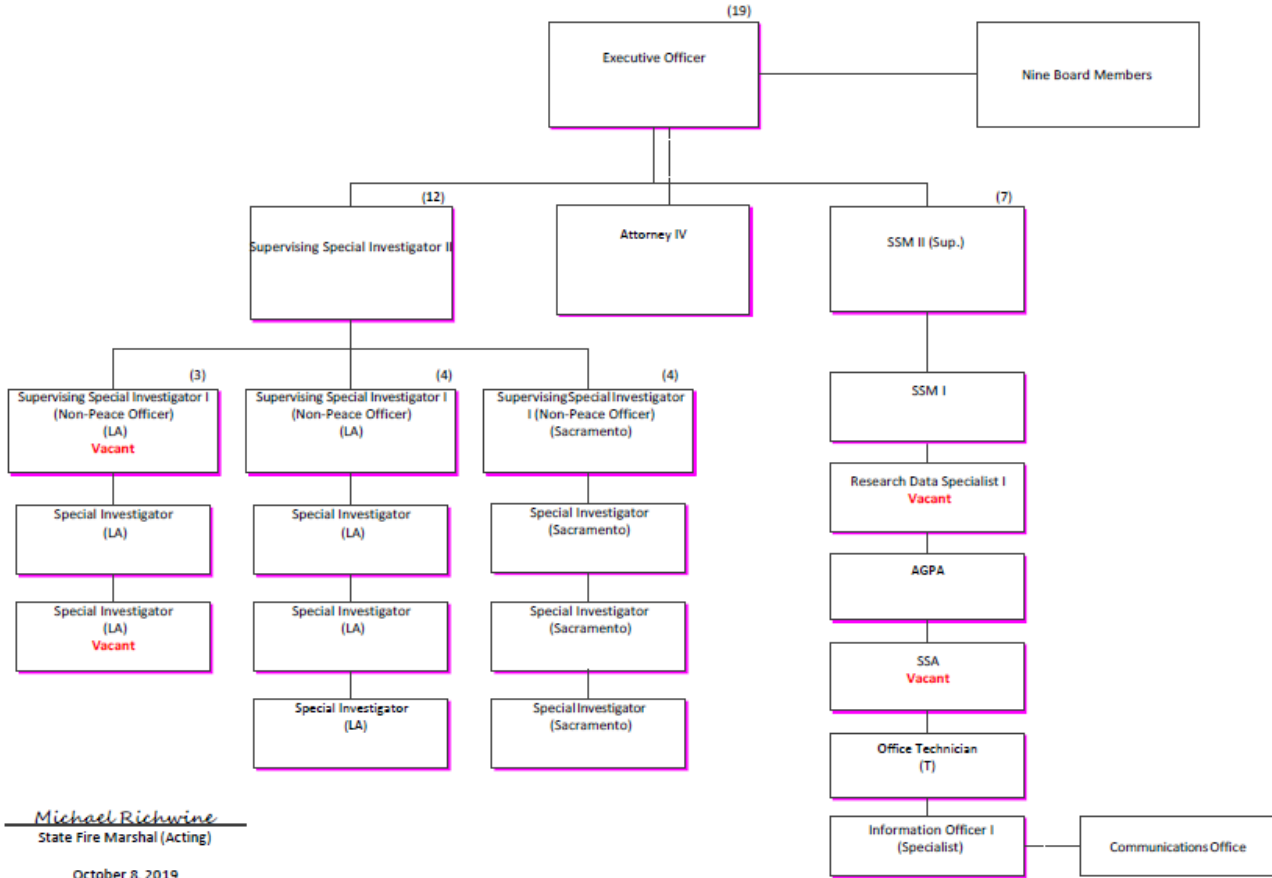
Name	Type of Event	Date	Brief Description	Audience Targeted
CARCGA Mock-Strike	Demonstration	04/2018	Staff attended CARCGA's 2018 Mock Strike Demonstration at the Safety Center in Sacramento and delivered a speech about the Board and its safety mission.	Construction Industry
SCCA 16 th Annual Legislative Day	Meeting & Networking	03/25/2019	Staff attended the Southern California Contractors Association's annual event in Sacramento to meet with attendees and introduce them to the Board and its safety mission.	Lawmakers, Trade Councils, Labor Unions, and Contractors
SRBX Safety Expo	Training & Expo	04/17/2019-04/18/2019	Staff attended the Sacramento Regional Builder's Exchange's two-day safety expo in Sacramento where they had a booth set up to introduce attendees to the Board and its safety mission, and attend several of the training sessions offered.	Construction Industry
CARCGA Mock-Strike	Demonstration	04/18/2019	Staff attended and participated in CARCGA's 2019 Northern California Mock Strike Demonstration in Sacramento. Staff demonstrated how the Board would respond to future dig-ins, and delivered a speech about the Board and its safety mission.	Construction Industry

Name	Type of Event	Date	Brief Description	Audience Targeted
UCON 2019 Scholarship Cornhole Tournament	Networking	05/09/2019	Staff attended the United Contractors 2019 Cornhole Tournament in Livermore. The event is attended by representatives from over 500 contractor, vendor, engineering, and design firms.	Contractors
SMUD 2019 Gas Pipeline Exercise	Safety Exercise	06/06/2019	Staff attended the Sacramento Municipal Utility District's annual exercise in Sacramento, designed to develop and maintain relationships between first responders, investigating agencies, and gas pipeline owners.	Utilities & First Responders
DigAlert-SDG&E Safety Awareness Event	Meeting	06/26/2019	Staff attended Dig Alert and San Diego Gas and Electricity's underground safety awareness breakfast in Escondido and gave a short presentation about the Board and its safety mission.	Excavators
CARCGA Mock-Strike	Demonstration	08/09/2019	Staff attended and participated in CARCGA's 2019 Southern California Mock-Strike Demonstration in Irvine. Staff demonstrated how the Board would respond to future dig-ins, and delivered a speech about the Board and its safety mission.	Excavators, Utilities, & Locators

Name	Type of Event	Date	Brief Description	Audience Targeted
USA North 811 Safety Breakfast	Meeting	08/15/2019	Member Voss attended USA North 811's Safety Breakfast in Bakersfield. The event discussed the 811 process and safe digging practices.	Contractors, Utilities, Locators, and Farmers
USA North 811 Safety Breakfast	Meeting	09/19/2019	Staff attended USA North 811's Safety Breakfast in Salinas and gave a short presentation about the Board and its safety mission.	Contractors, Utilities, and Locators
DigAlert Safety Awareness Event	Meeting	09/25/2019	Staff attended DigAlert's underground safety awareness breakfast in Chino and gave a short presentation about the Board and its safety mission.	Excavators
USA North 811 Safety Breakfast	Meeting	10/09/2019	Staff attended USA North 811's Safety Breakfast in South San Francisco and gave a short presentation about the Board and its safety mission.	Contractors, Utilities, and Locators
USA North 811 Safety Breakfast	Meeting	10/17/2019	Staff attended USA North 811's Safety Breakfast in Santa Rosa and gave a short presentation about the Board and its safety mission.	Contractors, Utilities, and Locators
USA North 811 Safety Breakfast	Meeting	10/30/2019	Staff attended USA North 811's Safety Breakfast in San Ramon and gave a short presentation about the Board and its safety mission.	Contractors, Utilities, and Locators

Attachment 2: Organization Chart

California Department of Forestry and Fire Protection
 Office of the State Fire Marshal
 Underground Facilities Safe Excavation Board



Michael Richwine
 State Fire Marshal (Acting)
 October 8, 2019
 Effective Date



THE CALIFORNIA DIG SAFE BOARD | 2251 Harvard Street, 4th Floor Sacramento, CA 95815

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