

In The Matter Of:
DPT. OF INDUSTRIAL RELATIONS
IN RE:

*PUBLIC MEETING AND
BUSINESS MEETING
March 16, 2023*

*CLARK REPORTING & VIDEO CONFERENCING
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1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

STATE OF CALIFORNIA

DEPARTMENT OF INDUSTRIAL RELATIONS

OCCUPATIONAL SAFETY & HEALTH STANDARDS BOARD

PUBLIC MEETING, PUBLIC HEARING AND BUSINESS MEETING

In the Matter of:)
March 16, 2023 OSH)
Standards Board Meeting)

)

IN-PERSON & TELECONFERENCE

Attend the meeting in person:

Ronald Reagan State Building

Auditorium

300 South Spring Street

Los Angeles, CA 90013

Attend the meeting via Video-conference:

Thursday, March 16, 2023

10:00 A.M.

Reported by:

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2

1 APPEARANCES

2 BOARD MEMBERS PRESENT AT RONALD REAGAN STATE BUILDING:

3 Dave Thomas, Chairman
4 Kathleen Crawford, Management Representative
5 Nola Kennedy, Public Member
6 Chris Laszcz-Davis, Management Representative.

7 BOARD MEMBERS PRESENT VIA TELECONFERENCE:

8 Barbara Burgel, Occupational Health Representative
9 Dave Harrison, Labor Representative
10 Laura Stock, Occupational Safety Representative

11 BOARD STAFF PRESENT AT RONALD REAGAN STATE BUILDING:

12 Christina Shupe, Executive Officer
13 Autumn Gonzalez, Chief Counsel
14 David Kernazitskas, Senior Safety Engineer
15 Sarah Money, Executive Assistant
16 Amalia Neidhardt, Principal Safety Engineer

17 BOARD STAFF ATTENDING VIA TELECONFERENCE AND/OR WEBEX:

18 Jesi Mowry, Administrative and Personnel Support
19 Analyst
20 Lara Paskins, Staff Services Manager.
21 Steve Smith, Principal Safety Engineer
22 Jennifer White, Regulatory Analyst

23 ALSO PRESENT AT RONALD REAGAN STATE BUILDING:

24 Eric Berg, Deputy Chief of Health, Cal/OSHA.

25 TKO STAFF (*Online attendance):

Sean Acrea
Vashish Singh
John Roensch
*Maya Morsi

PANEL DISCUSSION MEMBERS:

Christina Shupe, Executive Officer, OSH Standards
Board
21 Igino Cafiero, Bear Flag Robotics, John Deere
22 Jassy Grewal, UFCW Western States Council
25

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3

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Michael Miiller, California Association of Winegrape
Growers
Walter Mizuno, Lyles College of Engineering, California State
University, Fresno
Yancy Yap, Senior Safety Engineer, Division of Occupational
Safety and Health

25

PUBLIC MEETING AND BUSINESS MEETING

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4

1 APPEARANCES (Cont.)

2 PUBLIC MEETING COMMENTERS: (*Online testimony)

3 Bruce Wick, Housing Contractors of California
4 Steve Johnson, Associated Roofing Contractors of
5 The Bay Area Counties

6 Christie Sasaki, Front-end Supervisor

7 *Adam Fine, Bluewhite

8 *Helen Cleary, Phylmar Regulatory Roundtable

9 *Dave K. Smith, Dave Smith and Co.

10 Priscilla Trinidad, Member, USCW Local 770

11 Marilyn Gonzales, Employee, Rite-Aid

12 Vincent Chairez, Pharmacy Technician, CVS.

13 *AnaStacia Nicol Wright, Worksafe

14 *Kelly Trevino, City of Fresno, Economic
15 Development Department

16 *Robert Moutrie, California Chamber of Commerce

17 *Renee Guerrero Deleon, SoCalCOSH

18 Derek Smith, UFCW, Local 324

19 Dan Napier, Certified Industrial Hygienist

20 Jeff Jergens, Association of Equipment Manufacturers

21 *Chris Zeitz, Fresno County Economic Development
22 Corporation

23 *Travis West, California Nurses Association

24 *Scott Miller, Fresno Chamber of Commerce

25 *Hector Saldivar, UFCW Work Forward

*Mitch Steiger, California Labor Federation

*Christopher Lee, United Contractors

16 PANEL DISCUSSION COMMENTERS: (*Online testimony)

17 Jeff Jergens, Association of Equipment Manufacturers
18 Evan Pope, Sabanto

19 Jassy Grewal, UFCW

20 Bryan Little, California Farm Bureau

21 *Trent Johnson, Raven Applied Technology

22 *Chris Zeitz, Fresno County Economic Development
23 Corporation

24 *Ann Katten, California Rural Legal Assistance
25 Foundation

*Jack Winters, Monarch Tractors

26 *Mitch Steiger, California Labor Federation

27 *Matthew Allen, Western Growers Association

28 *Hernan Hernandez, California Farmworker Foundation

29 Michael Miiller, California Association of Winegrape
30 Growers

31

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5

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24

I N D E X

Page

I.	CALL TO ORDER AND INTRODUCTIONS	6
II.	PUBLIC MEETING (Open for Public Comment)	
	A. PUBLIC COMMENT	
	B. ADJOURNMENT OF THE PUBLIC MEETING	
III.	BUSINESS MEETING All matters on this Business Meeting agenda are subject to such discussion and action as the Board determines to be appropriate.	77
	The purpose of the Business Meeting is for the Board to conduct its monthly business.	
	A. PROPOSED VARIANCE DECISIONS FOR ADOPTION	77
	1. Consent Calendar	
	B. REPORTS	
	1. Division Update - 79	
	2. Legislative Update - 102	
	3. Executive Officer's Report - 102	
	C. PANEL DISCUSSION (Automated Agricultural Equipment)	105
	1. The Board will hold a discussion with invited panel members regarding automated agricultural equipment.	
	2. Public Comment on Panel Discussion.	
	D. NEW BUSINESS	
	1. Future Agenda Items	
	Although any Board Member may identify a topic of interest, the Board may not substantially discuss or take action on any matter raised during the meeting that is not included on this agenda, except to decide to place the matter on the agenda of a future meeting.	

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(Government Code sections 11125 & 11125.7(a).)

E. CLOSED SESSION

Matters Pending Litigation

1. Western States Petroleum Association (WSPA) v. California Occupational Safety and Health Standards Board (OSHSB), et al. United States District Court (Eastern District of California) Case No. 2:19-CV-01270
2. WSPA v. OSHSB, et al., County of Sacramento, CA Superior Court Case No. 34-2019-00260210.

Personnel

F. RETURN TO OPEN SESSION

1. Report from Closed Session

G. ADJOURNMENT OF BUSINESS MEETING

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7

1 P R O C E E D I N G S

2 MARCH 16, 2023 10:00 A.M.

3 CHAIR THOMAS: Good morning. And live from
4 Los Angeles, California, it's the OSHA Standards Board
5 meeting. Glad to see you all out this morning. This
6 meeting of the Occupational Safety and Health Standards
7 Board is now called to order.

8 I'm Dave Thomas, Chairman, and the other
9 Board Members present here in Los Angeles are Ms.
10 Kathleen Crawford, Management Representative; Ms. Nola
11 Kennedy, Public Member; Ms. Chris Laszcz-Davis,
12 Management Representative. Board Members attending via
13 teleconference are Ms. Barbara Burgel, Occupational
14 Health Representative; Mr. Dave Harrison, Labor
15 Representative; and Ms. Laura Stock, Occupational Safety
16 Representative.

17 Present from our staff for today's meeting are
18 Ms. Christina Shupe, executive officer; Ms. Amalia
19 Neidhardt, Principal Safety Engineer, who is also
20 providing translation services for our commenters who
21 are native Spanish speakers; Ms. Autumn Gonzalez, Chief
22 Counsel; Mr. David Kernazitskas, Senior Safety Engineer;
23 and Ms. Sarah Money, Executive Assistant.

24 Also present is Mr. Eric Berg, Deputy Chief of
25 Health for Cal/OSHA.

1 Supporting the meeting remotely are
2 Mr. Steve Smith, Principal Safety Engineer - Special
3 Consultant; Ms. Lara Paskins, Staff Services Manager,
4 Ms. Jen White; Regulatory Analyst; and Ms. Jesi Mowry,
5 Administrative and Personnel Support Analyst.

6 Copies of the agenda and other materials for
7 today's meeting are on the table near the entrance to
8 the door.

9 This meeting is also being live broadcast via
10 video and audio stream in both English and Spanish.
11 Links to these non-interactive live broadcasts can be
12 accessed via the "Meetings, Notices, and Petitions"
13 section on the main page of the OSHSB website.

14 If you're participating today's meeting via
15 teleconference or videoconference, we're asking everyone
16 to place their phones and computers on mute and wait
17 until they are -- that you're called to speak, and then
18 -- then when you're called to speak, you unmute
19 yourself, and then after you speak, please mute
20 yourself again.

21 As reflected on the agenda, today's meeting
22 consists of two parts. First, we will hold a public
23 meeting to receive public comment on proposals on
24 occupational safety and health matters. Anyone who
25 would like to address the occupational safety and health

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1 issue, including any of the items on our business
2 meeting agenda, may do so when I invite public comment.

3 If you are participating via teleconference or
4 video conference, the instructions for joining the
5 public comment queue can be found on the agenda. You
6 may join by clicking the public comment queue link in
7 "Meetings, Notices, and Petitions" section on the OSHSB
8 website or by calling 510-868-2730 to access the
9 automated public comment queue voicemail.

10 When public comment begins, we're going to
11 alternate three in-person speakers and three remote
12 speakers. When I ask for public testimony, in-person
13 commenters should provide a completed speaker slip to
14 the staff person near the podium and announce themselves
15 to the Board prior to delivering comments.

16 For commenters attending via web conference or
17 teleconference or video conference, please listen for
18 your name and invitation to speak. When it's your turn
19 to address the Board, unmute yourself; if you're using
20 WebEx or dial *6 on your phone to unmute yourself if
21 you're using teleconference line.

22 We all ask commenters to speak slowly and
23 clearly when addressing the Board. And if you are
24 commenting via teleconference or video conference,
25 remember to mute your phone or computer after

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1 commenting.

2 Today's public comment will be limited to two
3 minutes per speaker and the public comment portion of
4 the meeting will extend for up to two hours so that the
5 Board may hear from as many members of the public as is
6 feasible. Individual speakers and total public time
7 limits may be extended by the Board Chair, me. So
8 we're usually pretty flexible.

9 And after the public meeting is concluded, we
10 will hold the business meeting to act on those items
11 listed on the business meeting agenda.

12 We'll now proceed with the public meeting.

13 One second here. Yeah, we'll now proceed with
14 the public meeting. Anyone who wishes to address the
15 Board regarding matters pertaining to occupational
16 safety and health is invited to comment, except,
17 however, the Board does not entertain comments regarding
18 variance matters. The Board's variance hearings are
19 administrative hearings where procedural due process
20 rights are carefully preserved. Therefore, we will not
21 grant requests to address the Board on variance matters.

22 For our commenters who are native Spanish
23 speakers, we are working with Ms. Amalia Neidhardt to
24 provide translation on their statements into English for
25 the Board.

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1 At this time, Ms. Neidhardt will provide
2 instructions to the Spanish-speaking commenters so that
3 they are aware of the public comment process for today's
4 meeting.

5 Amalia.

 MS. NEIDHARDT: (READS THE FOLLOWING IN SPANISH)

6 "Good morning, and thank you for participating in today's
Occupational Safety and Health Standards Board Meeting. The
7 Board members present here in Los Angeles are Mr. Dave Thomas,
Labor Representative and Chairman; Ms. Kathleen Crawford,
Management Representative; Ms. Nola Kennedy, Public Member; Ms.
Chris Laszcz-Davis, Management Representative.

 The Board Members attending via teleconference are
Ms. Barbara Burgel, Occupational Health Representative; Mr.
Dave Harrison, Labor Representative; and Ms. Laura Stock,
Occupational Safety Representative.

1 "This meeting is also being live broadcast via
2 video and audio stream in both English and Spanish.
3 Links to these non-interactive live broadcasts can be
4 accessed via the "Meetings, Notices, and Petitions"
5 section on the main page of the OSHSB website.

6 "If you're participating in today's meeting via
7 teleconference or videoconference, please note that we have
limited capabilities for managing participation during public
comment periods. We are asking everyone who is not speaking to
place their phones or computers on mute and wait to unmute until
they are called on to speak. Those who are unable to do so will
be removed from the meeting to avoid disruption.

8 As reflected on the agenda, today's meeting
9 consists of two parts. First, we will hold a public

PUBLIC MEETING AND BUSINESS MEETING

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12

10 meeting to receive public comments or proposals on
11 occupational safety and health matters.

PUBLIC MEETING AND BUSINESS MEETING

1 "If you are participating via teleconference
2 or video conference, the instructions for joining the
3 public comment queue can be found on the agenda. You
4 may join by clicking the public comment queue link in
5 "Meetings, Notices, and Petitions" section on the OSHSB
6 website or by calling 510-868-2730 to access the
7 automated public comment queue voicemail.
8

9 "When public comment begins, we're going to
10 alternate three in-person speakers and three remote
11 speakers. When I ask for public testimony, in-person
12 commenters should provide a completed speaker slip to
13 the staff person near the podium and announce themselves
14 to the Board prior to delivering comments.

15 "For commenters attending via web conference
16 or teleconference or video conference, please listen for
17 your name and invitation to speak. When it's your turn
18 to address the Board, unmute yourself if you're using
19 WebEx or dial *6 on your phone to unmute yourself if
20 you're using teleconference line.

21 "We all ask commenters to speak slowly and
22 clearly when addressing the Board. And if you are
23 commenting via teleconference or video conference,
24 remember to mute your phone or computer after
25 commenting.

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14

1 "Today's public comment will be limited to four
2 minutes for speakers utilizing translation and the public comment
3 portion of the meeting will extend for up to two hours so that
4 the Board may hear from as many members of the public as is
5 feasible. Individual speakers and total public time
6 limits may be extended by the Board Chair.

7 "After the public meeting is concluded, we
8 will hold the business meeting to act on those items
9 listed on the business meeting agenda.

10 "Thank you."

11 CHAIR THOMAS: Thank you, Amalia.

12 You know, I used to try and follow her, but
13 it's English, so I'm trying to figure out everything
14 she's saying. But then I figured I'd just listen for
15 "Gracias" and that's it.

16 So she does a great job. Thank you, Amalia.
17 You do a really good job.

18 So at this time if there are any in-person
19 participants who would like to comment on any matters
20 concerning occupational safety and health, you may begin
21 lining up at this time.

22 And I notice we have a police officer in the
back of the room. So if you decide to rush the Board
for any reason -- I think we have protection; I'm not

1 sure.

2 Anyway, so name and affiliation, please.

3 MR. WICK: Thank you, Chair Thomas.

4 Bruce Wick, Housing Contractors of California.

5 I'd like to comment quickly on three regs that
6 are in various stages of process.

7 As we know, regulations -- words on paper
8 don't protect workers. How we protect workers is
9 educating workers, their supervisors, and the
10 1.4 million safety coordinators that there are in
11 California for employers. And then we craft a good reg
12 that they all understand, that meshes with their
13 education, their understanding of something.

14 The good news is Cal/OSHA has Brandon Hart
15 leading the publications department and he does a great
16 job. But he will only publicize things that are -- he's
17 told to. And I -- what I would like to see is more
18 education and disseminated far and wide. We have a lot
19 of avenues for that.

20 If we have a well-crafted reg, then -- in the
21 education -- then employees, their advocates, and
22 employers can complain and have enforcement come in for
23 those employers that don't want to comply. But even
24 within a company, safety coordinators understand the
25 reg. They can discipline their supervisors. When

1 they're not following, supervisors can discipline
2 employees when they're not following. That's how we
3 protect people. And the good news is we have an
4 effective enforcement division under Debra Lee in
5 Cal/OSHA.

6 So the key is getting education. And while
7 you all are part of developing the reg, I'd like you
8 really use your voice to tell the Division, "Don't wait
9 until regs are given to us before they publicize
10 education. We need it and they have so many avenues to
11 do that."

12 So the three regs: Indoor heat. As you know,
13 Senator Leyva back in 2016 passed a bill that said, "Hey,
14 we have warehouse workers in the Inland Empire and some
15 others. They need protection."

16 And we had the first advisory committee
17 February 28, 2017, over six years ago, and a gentleman
18 named Bruce -- so I paid attention to Bruce. He came --
19 he's a logistics worker, came all the way up from
20 Southern California to Oakland and talked about the job
21 he does. And I've done that work -- hand stacking and
22 unstacking of freight and freight trailers. It's
23 honorable work; it's hard work, necessary work. But in
24 a hot trailer that's unventilated, it -- that's a
25 hazard.

1 He took a day off to come to talk to
2 everybody. And where the bill allowed Cal/OSHA to back
3 off from covering everybody and just said, "We can focus
4 on those employees who have that kind of exposure, the
5 consensus amongst the parties drafting it." And some on
6 the workers' advocates were, "No, let's cover everybody."

7 And I said, "If we do that, you're not going to
8 protect Bruce. We're going to be five years down the
9 road and he still won't have a regulation. So let's
10 educate. Let's put out something that educates people
11 on indoor heat."

12 And the -- Senator Leyva knew and the bill
13 talked about Cal/OSHA had sustained citations under the
14 IIPP for indoor heat. So we knew that could happen. So
15 I think we failed Bruce and all his colleagues who
16 needed a reg. And here we are six years later and something
17 will come down next month, but it's not ready, because
18 it's trying a "one size fits all."

19 Workplace violence, similar -- similar issue.
20 In 1995, we developed a very simple thing, part of the
21 IIPP, that said -- especially for those employers with
22 minimal exposure, said zero tolerance for threats. If
23 an employee is a former employee, they are not allowed
24 back on the work site unless given specific permission
25 and everybody knows. And every employee is empowered to

1 dial 911. That's simple. That's protective.

2 Nothing has been done, educationally, changing
3 for general industry since 1995. Please tell -- ask
4 strongly the Division to put something out until we get
5 our reg developed and promulgated. This is really
6 important.

7 And then we have lead. So the last advisory
8 committee was 2015. In those eight years, a lot of
9 people who were involved in advisory committees have
10 retired, left, and a lot of people who should be
11 involved weren't here yet. They've been hired or
12 they've been promoted or something. So we should have
13 an advisory committee.

14 And we had a draft from 2016 that in
15 construction was 33 pages long. Suddenly we get a
16 draft reg under 45-day public comment, 85 pages long with
17 substantial changes to the reg itself, and then the
18 three appendices have a whole lot of changes that are
19 the other 47 pages. How can we have a 45-day public
20 comment period that could be effective with that?

21 So, please, we need to extend the public
22 comment period. I really hope there's a way we can do
23 an advisory committee, because there's just too many
24 people that need to engage who haven't been -- you know,
25 who weren't there eight years ago when we had the last,

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1 when there's a lot more to do. So please give us that.

2 Steve Johnson's going to talk a little bit
3 more specifically about the lead reg.

4 But you have a strong voice to go back to the
5 Division. Please tell them, "Let's educate."

6 And on these, you know, it's nice to say we
7 want a one size fits everybody and let's cover
8 everybody, but we aren't doing people like Bruce right
9 when we do that. We need specific regs or a reg that
10 covers some people specifically and, you know, minor for
11 those employers with minimal exposure.

12 Thank you.

13 CHAIR THOMAS: Thank you.

14 He used up all your time, so let's just go to
15 -- no. Go ahead. Go ahead.

16 MR. JOHNSON: Good morning, Mr. Chairman,
17 members of the Board, Division staff, and Standards
18 Board staff. My name is Steve Johnson. I'm -- I
19 represent Associated Roofing Contractors of the Bay Area
20 Counties. We're a regional union roofing association.

21 And one of the things that I wanted to kind of
22 expand a little bit on what Bruce was talking about with
23 the -- the lead regulations specifically for
24 construction. And I completely agree with extending the
25 comment period, completely agree with reconvening an

1 advisory committee to really go over and have the time
2 to review what is a lengthy regulation with a lot of
3 changes.

4 Just -- just to give you a few, the
5 introduction of trigger tasks into construction,
6 basically, it presumes that any trigger-task work will
7 be above the PEL. And it pulls in things like requiring
8 portable showers on job sites, requiring medical
9 surveillance prior to even going on the job, requires
10 administrative controls, requires documenting
11 administrative controls, requires review of revisions
12 and updates every six months to the exposure control
13 plan and to the elevated blood lead level response plan,
14 two written plans that have to be reviewed every six
15 months.

16 I haven't seen that in any other regulation.
17 I mean, generally, there's a requirement for an annual
18 review. This requires the person doing the review to,
19 you know, document who that person is, requires every
20 six months that they have to review it, and if you miss
21 that by one day, then that's a potential for a citation.
22 I just don't understand how that contributes to employee
23 safety.

24 The new appendice -- the additions to the new
25 appendices. The regulations are ultimately supposed to

1 be written for the regulated public. This
2 regulation as it stands right now is confusing. The
3 additions that have been made just since 2016, it reads
4 like the tax code. You can't read three or four
5 sentences without referring back to another section of
6 the regulation where it -- it's completely confusing.

7 In my position, I'm the one who tries to
8 provide training for our roofing contractors. If I
9 can't understand it, as somebody who's been working in
10 health and safety for 30 years, I don't expect the
11 average roofer to even have a concept or a grasp of what
12 they're trying to do. Roofing owners, it's -- it's --
13 there's a lot to unpack.

14 And ultimately I think with the additional
15 impact, the costs to the consumer haven't even been
16 calculated in the SRIA. An average homeowner will have
17 to pay an additional \$21,000 to have a roofing crew go
18 and work on their house to get a new roof if there's
19 going to be any lead flashings, the way the regulation's
20 written. That will be the impact to the homeowner.

21 We -- our association is made up of union
22 employees, union roofing contractors. I can see this
23 affecting union jobs. I can see union jobs going away
24 with the additional cost impact that is going to be a
25 result of the way this regulation's written. So we need

1 time to unpack this. We need time to talk with the
2 Division. We need time to educate and train, as Bruce
3 was saying.

4 And I just -- you know, I want to leave it at
5 that and thank the Standards Board staff for -- for
6 meeting with -- with Bruce and I and other roofing
7 representatives just to kind of air our grievances a
8 little bit. And that was appreciated, and I think -- I
9 think -- helpful. We need more time to talk with the
10 Division. We need the Division to be open to an
11 advisory committee in extending the comment period.

12 Thank you.

13 CHAIR THOMAS: Thank you. So I have one more
14 commenter from here and then we'll go to the phones.

15 So go ahead.

16 MS. SASAKI: Good morning, everyone. My name
17 is Christie Sasaki. I've worked in the grocery industry
18 for 33 years and I'm here today to speak about my
19 experience with workplace violence.

20 I'm currently working as a front-end
21 supervisor at a Pavilions grocery store in Beverly
22 Hills. It's an affluent area and everyone might think
23 it's safer there, but it's not. However, my coworkers
24 and I are exposed to many workplace violence incidents
25 at all times. On a daily basis we have some customers

1 verbally abusing employees and people stealing at my
2 store. Many times we have shoplifters who are extremely
3 aggressive.

4 In late January at approximately 9:35 p.m.,
5 our liquor alarm went off. Looking into the monitor at
6 the front desk, our security guard on duty noticed two
7 people heavily shaking the liquor cabinet. The
8 individuals then approached the front and asked me for
9 four bottles of liquor. I opened the front case while a
10 coworker helped me gather the bottles and deliver them
11 to my checkstand. We didn't want these aggressive
12 people in the store any longer than necessary.

13 After scanning the four bottles and without
14 paying, one of the individuals grabbed the bottle and
15 walked towards the door. The second person tried to do
16 the same thing with the remaining bottles on the
17 conveyor belt, but my coworker grabbed them first.

18 Perpetrators were a male and a female. I
19 recognized one of them from a previous incident
20 involving the same scenario -- the smash/grabbing to
21 steal. Both ran out the door to their car that was
22 parked in the handicapped spot, backed into the stall
23 right in front of the store and all ready for their
24 getaway.

25 The guard and I walked to the main door. The

1 guy turned around and looked at both of us in the eye
2 and said he was going to blow us away. It was very
3 scary. I didn't know if he had a gun in the car. I
4 feared for my life. My coworkers later shared with me
5 that they had the same feeling. We work the most
6 dangerous shift and there's no one else in the store,
7 just the three of us.

8 Just the thought that they might have killed
9 me in the process is distressing. My daughter wouldn't
10 have a mother. My friends wouldn't have me to join them
11 for lunch. My parents wouldn't have me to hug. I took
12 this incident very seriously and called the police.
13 I sent a report to the company, but they didn't do
14 anything beyond taking the report.

15 Unfortunately, we're not properly trained to
16 deal with these types of workplace violence situations.
17 I did receive training as a supervisor. The training
18 consisted of a few minutes on the company computer.
19 That training basically advised us to make ourselves
20 visible and to confront the person by asking them if
21 they needed any help.

22 I work in a small store, which is often busy
23 and has a constant flow of customers. The problem is
24 that we work understaffed. It's just me running the
25 entire store, working with just two more employees. I

1 feel responsible for everyone's safety in the store,
2 including customers.

3 The company needs to improve the safety and
4 security in the store. We need properly trained
5 security guards who can tackle thieves and are not just
6 there for deterrence. The company could do better and
7 invest more to protect workers and customers in the
8 store.

9 That's why I urge the Occupational Safety and
10 Health Standards Board Members to support me and all
11 retail workers to have workplace safety standards in
12 place that can protect us and our customers from
13 workplace violence.

14 Thank you very much.

15 CHAIR THOMAS: Thank you.

16 So we're going to go to our -- go to our
17 people that have called in on the queue. So, John, who do
18 we have?

19 MS. MORSI: Up first is Adam Fine with
20 Bluewhite.

21 This is Maya. Sorry.

22 CHAIR THOMAS: Where are you, Maya? I was
23 looking for you.

24 MS. MORSI: I'm remote.

25 CHAIR THOMAS: Okay. Well, that's why I

1 couldn't find you. Okay. Who do we have?

2 MS. MORSI: Adam Fine with Bluewhite.

3 CHAIR THOMAS: Adam, can you hear us?

4 MR. FINE: Yeah. Can you hear me all right?

5 CHAIR THOMAS: Yeah. Go right ahead.

6 MR. FINE: Fantastic.

7 So I'm here to speak on the autonomous tractor
8 regulation today.

9 Chair Thomas, members of the Board, thank you.
10 My name is Adam Fine and I'm a business development
11 manager at Bluewhite, but I'm also speaking in a
12 personal capacity.

13 A large part of my job is to recognize and
14 highlight opportunities, and that is what I'm here to
15 share with you today. We have a chance, if we do this
16 correctly, to have a real and meaningful conversation
17 about autonomous technologies and what they're capable
18 of.

19 Firstly, workplace safety is the greatest
20 opportunity. We hear the argument that keeping an
21 operator in the cab of an autonomous tractor will be the
22 safest. However, tractor rollovers account for
23 150 deaths in the United States each year. Moving the
24 operator from the equipment to a remote location
25 prevents this from ever happening again.

1 We also hear concern for workers that may be
2 endangered in the path of travel. This is a concern
3 shared and solved by many manufacturers as a basic
4 function of the technology. Furthermore, agricultural
5 equipment operators face secondary risks of chemical,
6 noise, and heat exposure, which this technology makes
7 unnecessary.

8 We often hear fears that autonomous equipment
9 will remove jobs, but the data doesn't support this.
10 California state EDD counts 15,000 tractor operators in
11 California with 30,000 positions needed. That's
12 50 percent unfilled.

13 With autonomous technology, this allows those
14 15,000 operators to make up the missing
15 (unintelligible). California Economic Development and
16 CDFA already know this and have secured nearly
17 80 million in state and federal grant funding for the
18 creation of an agriculture technology hub in
19 California's Central Valley.

20 And I quote: According to the Fresno-Merced
21 Future of Food Innovation (F3) and Fresno County
22 Economic Development Corporation, the money will support
23 roughly 1,000 small farmers, training for 8,000 for
24 other food and ag workers, and help increase wages.

25 In addition, the I-Create tech hub allows

1 research and resources as well as partnerships with
2 UC Merced, Fresno State, and the region's eight
3 community colleges. Students and workers will have
4 access to training, job placement opportunities for this
5 new technology. Within the next three years, the goal
6 is to see at least 2,500 new jobs focused around
7 agriculture technology --

8 CHAIR THOMAS: We -- we lost you. We lost
9 your voice. I don't know what happened to your audio.

10 MR. FINE: Sure.

11 CHAIR THOMAS: There you go.

12 MR. FINE: Sorry.

13 Based on the 200 global ag technology
14 companies that gathered in Fresno for the FIRA
15 conference last October, those 2,500 jobs are easily
16 achieved, if not greatly underestimated. Startups in ag
17 tech raised 50 billion in funding since 2021 and will
18 gladly spend that growing in California given the
19 opportunity.

20 Technology is a force multiplier. It has the
21 unique capability of bringing opportunities to those
22 without them. I myself came from a service industry
23 background, working in restaurant kitchens until I was
24 paralyzed in a road collision. Learning autonomous
25 technologies allowed me to re-enter the workforce, start

1 a business, and ultimately regain my independence. I
2 still use technology each day for everything that I do
3 and I am so grateful for that opportunity.

4 And so I would ask you, the Board, do
5 agricultural communities not deserve that same
6 opportunity to increase their skills, leverage
7 technologies, and improve their lives? Academics,
8 government, economic development, industry, and labor
9 all have aligned incentives to see autonomous
10 agriculture succeed and benefit from it. An advisory
11 committee is the only mechanism where these groups can
12 come together and have a real problem-solving
13 conversation. Autonomous technology will bring economic
14 growth and well-paying high-tech jobs with transferable
15 skills to disadvantaged agricultural communities and,
16 most importantly, remove operators from heat, noise,
17 chemical, and machinery hazards.

18 And so I implore the Board to impanel an
19 advisory committee to investigate how we safely
20 integrate autonomous equipment on California farms. It
21 is an opportunity that we can miss together or share
22 together.

23 Thank you for your time in listening to me
24 today. I am hopeful for continued and fruitful
25 cooperation with Cal/OSHA. Thank you very much.

1 CHAIR THOMAS: Thank you.

2 Who do we have next in the queue, Maya?

3 MS. MORSI: Up next is Mike with

4 Vino Farms, LLC.

5 CHAIR THOMAS: Mike, can you hear us? Hello,

6 Mike?

7 We got lucky this time because the first guy
8 did get through.

9 But, Mike, are you there? Yeah, let's go on
10 to the --

11 Yeah, *6 if you're still there, Mike.

12 And let's move on to the next, Maya.

13 MS. MORSI: Okay. Up next is Amber Fowler
14 with Agtonomy.

15 CHAIR THOMAS: Amber, can you hear us? *6?

16 All right. Go to the next.

17 MS. MORSI: Okay. Up next is Helen Cleary,
18 director of PRR, which is Phylmar Regulatory Roundtable.

19 CHAIR THOMAS: Helen, can you hear us?

20 MS. CLEARY: I can. Good morning. You can
21 hear me, right?

22 CHAIR THOMAS: Yeah. I was hoping you would
23 break through this. Go ahead. Go right ahead.

24 MS. CLEARY: Right, yeah. The block. Clear the
25 block.

1 Good morning, Chair Thomas, Board Members, and
2 staff. I am Helen Cleary, the director of PRR
3 OSH Forum.

4 I'd like to address the proposed amendment to
5 the lead standard for construction in general industry.
6 PRR members, particularly utilities and communications,
7 are very concerned about the proposed amendments to the
8 construction standard, specifically how the requirements
9 will impact repair and maintenance operations. PRR
10 members request that the Division consider frequency and
11 duration and are frustrated their valid concerns and
12 experiences are not reflected in the proposed text.

13 We are working on written comments and are
14 planning to testify at the hearing next month, but
15 wanted to voice our concerns as soon as possible so the
16 Board is aware of some detail.

17 To be clear, we're not opposed to the overall
18 objective of reducing the blood lead burden of workers.
19 We agree and understand that exposure to lead at lower
20 levels can have harmful health effects that were not
21 understood when the regulation was published in 1978.

22 Our primary concern is that when the triggers
23 were significantly lowered, which greatly expanded the
24 scope, the required controls did not change and they
25 became more complicated. Changing the numbers and

1 keeping the required employer response similar may sound
2 like it makes sense, but a different strategy is needed
3 to address the operational impact from the new lower
4 action levels and permissible exposure limits.

5 We don't think that it's reasonable to manage
6 these lower levels in the same way that employers are
7 responding to the current levels in the rule.

8 Such a low action level will result in the
9 need for exposure assessments for a multitude of worker
10 tasks that most likely will not result in exposure above
11 the lowered PEL. Despite this, the employers required
12 to implement interim protections regardless of duration,
13 frequency, and level of risk of a worker's potential
14 exposure until an exposure assessment is complete.

15 The interim procedures are significant.
16 Respiratory protection PPE change areas in medical
17 surveillance that may include blood lead testing or some
18 of them. This may be reasonable for workers who are
19 known to be exposed to lead on a daily basis or are
20 anticipated to be exposed above the PEL, but we don't
21 think it's reasonable for all potential exposures that
22 may reach an action level as low as two micrograms per
23 cubic meter of air. We believe these burdensome steps
24 will result in unnecessary over-protection.

25 Another industry concern is the updated

1 accuracy of measurement requirements in (d) (9). The
2 traditional method of analysis (unintelligible) is not
3 sensitive enough to reach the two-microgram threshold,
4 especially during short-term tasks. And we're not aware
5 of another NIOSH analytical method that can even meet
6 this employer requirement.

7 In addition, the rule seems to be written for
8 fixed work spaces and does not consider mobile
9 workforces or emergency operations. We see this in the
10 requirement to provide shower facilities and the removal
11 of the feasibility consideration.

12 Regarding both construction in general
13 industry, the new definition of altering and disturbing
14 will unnecessarily increase the number of California
15 employers and industries that are subject to the rule.
16 Employers not typically required to follow the lead
17 standards will need to consider a myriad of tasks the
18 workers may be directly or indirectly subject to because
19 there is a potential for low-risk exposure to lead,
20 including all work that disturbs roadside soil anywhere
21 in the state.

22 Another example in general industry, employers
23 will be required to have a training program for
24 employees who are exposed to lead at or above the action
25 level, which is now two micrograms per cubic meter of

1 air "on any day". That training requirement alone
2 will have a huge impact on businesses of all sizes in
3 California.

4 PRR realizes that this rule has been in the
5 works for many years and DIR, Cal/OSHA, and the Board
6 are eager to finalize it. However, addressing the
7 concerns the industry is trying to communicate
8 throughout the process is integral to a final rule
9 that's effective, and involving employer stakeholders
10 who are unaware that this -- they will be impacted is
11 also important.

12 Division staff acknowledged at the last
13 advisory committee meeting -- it's on Page 10 of the
14 meeting notes -- that someone -- that something needed
15 to be done to address the concerns of utilities, the
16 communication industries, cities, counties, state.
17 Somebody even mentioned the highway patrol.

18 When we compared the drafts from 2015 that was
19 used at that meeting, the 2016 draft that was revised
20 after the meeting and submitted for the SRIA and today's
21 proposal, besides becoming more onerous, not much was
22 different in the drafts. This group was disappointed to
23 see and we think illustrates the valid industry concerns
24 were not addressed and that consistence wasn't achieved.
25 We're hopeful the Division and the Board will listen to

1 industry's valid concerns and respond with proposed
2 amendments before a final rule is adopted.

3 Thank you for your time today and it's nice
4 being on camera.

5 CHAIR THOMAS: Thank you, Helen.

6 Who do we have next, Maya?

7 MS. MORSI: Up next is Dave K. Smith with
8 Dave Smith and Co., safety consultant.

9 CHAIR THOMAS: Can you hear us, caller?

10 MR. SMITH: Yes, I can. Can you hear me?

11 CHAIR THOMAS: Yeah. Go right ahead.

12 MR. SMITH: Great. Well, good morning to the
13 Board and attendees. I'm Dave Smith, a safety
14 consultant in California and the author of Petition 483
15 on first-aid kits. And I'm back.

16 Seventeen years have passed and we still can't
17 tell California employers which first-aid kit to buy.
18 At the February Board meeting there was surprise among
19 the regulated community. The promised first-aid kit
20 standard was not on the agenda. And this month, the
21 April meeting web post mentions only the lead standard
22 revisions.

23 Can we get the first-aid kit package on the
24 April agenda, or does it have to wait until May? And
25 then, if not May, then when? Will it be another 17

1 years?

2 I understand that this issue gets postponed
3 because of more significant hazards or issues such as
4 we've heard already this morning. The reasons for the
5 delay include lack of resources or staff.

6 My observation is there are few, if any,
7 employer and labor safety and health departments that
8 don't have enough to do. Many safety and health
9 departments are in constant triage mode, always choosing
10 what to focus on immediately and then postponing the
11 rest.

12 However, if the Division were to open an
13 inspection -- a regulatory enforcement action -- an,
14 employer excuse of, "We don't have enough resources"
15 would no doubt be heard as, "We don't want to follow
16 safety and health laws." That excuse simply won't work.

17 Most safety and health professionals,
18 including me, have been there, been triaging safety
19 issues at some point in their career. A fast way out of
20 the eternal lack of resources is to do the easy ones
21 first and then tackle the more complicated issues.
22 First-aid kits are an easy one.

23 In February, comments by both Board Members and
24 employer representatives show there's little or no
25 opposition to the revision of the first-aid kit

1 standards.

2 I encourage the Board and staff to get
3 first-aid kits done so that we can deal with the many
4 safety issues that we've already heard this morning,
5 and I encourage the Board to vote yes on this long
6 overdue proposal.

7 Thank you very much.

8 CHAIR THOMAS: Thank you.

9 So now we'll go to in-person commenters. So
10 welcome to the podium and state your name and
11 affiliation, please.

12 MS. TRINIDAD: Hello. Good morning, members
13 of the Occupational Safety and Health Standards Board.
14 My name is Priscilla Trinidad. I am a USCW Local 770
15 member and a grocery store worker for almost 19 years
16 now.

17 Thank you for allowing me to testify at
18 today's hearing on the urgency and need to address
19 workplace violence in general industries, including
20 retail. Workers like myself must be protected because
21 workplace violence affects all essential grocery store
22 workers.

23 According to OSHA, each year nearly two million
24 American workers are victims of workplace violence.
25 Workplace violence is the second leading cause of fatal

1 occupational injuries in the United States, and hate
2 crimes have quadrupled at grocery stores since 2010,
3 making them a hotbed for racism and workplace violence.

4 At my Von's grocery store, which is located in
5 a nice neighborhood in West Los Angeles, workers are
6 subject to verbal, emotional, and physical abuse every
7 single day by the public. On one occasion, a shoplifter
8 pulled out a knife when asked to not take items without
9 paying. Unfortunately, this incident is not unique.
10 There have been customers who throw stuff at us, spit
11 at us, and call us racist names. I've had bottles thrown
12 at me. And our store had an employee who was punched in
13 the eye. She quit because she was traumatized and
14 didn't feel safe at the store anymore.

15 We should not have to worry about whether we
16 will be safe at work or come back to our families when
17 our shift ends. The harassment and violence that
18 everyday essential workers have to bear takes a mental
19 toll on us up to the point that some workers don't want
20 to show up for work the next day because they feel so
21 unsafe at their store.

22 Last year a fellow union member and Rite-Aid
23 worker, Miguel Nunez Penaloza, who worked at a store in
24 Los Angeles paid the ultimate price and was murdered on
25 the job after confronting a shoplifter.

1 Company policy requires that employees
2 approach potential shoplifters and ask them, "Hi, how can
3 I help you?", even when we know they are in the middle of
4 a crime and could physically harm us. These company
5 policies put workers at risk.

6 This is a reminder that it is not our
7 responsibility to confront and stop theft at the
8 workplace, especially when it requires us to put
9 ourselves in harm's way.

10 Sometimes grocery workers will have security
11 guards present to assist with incidents at the
12 workplace, but often the security guards are only there
13 for a limited period during the day, and then we have
14 no security in the early morning or late at night,
15 leaving gaps in coverage.

16 The security guards' responsibilities vary, and
17 sometimes they are limited in what they can do to
18 respond when an incident happens, and oftentimes they
19 themselves are attacked. This does not make us feel
20 safe at our workplace.

21 Currently, there is no internal rapid-response
22 system in the place to respond and de-escalate
23 situations. We are told by management to call 911 or
24 law enforcement hotline number, which is rarely staffed.
25 Even when we call law enforcement, the response time is

1 very delayed. Law enforcement will show up hours later,
2 days later, or not at all, and we are left feeling very
3 alone, having to deal with these often dangerous
4 situations by ourselves. With the knife incident we had
5 a few months ago, law enforcement didn't show up until
6 the next day. The situation could have escalated and
7 become very tragic in that amount of time.

8 As workers, we approach our employees when
9 incidents are happening, who then push us off to law
10 enforcement, and neither of these entities take
11 responsibilities for assisting us when workplace
12 violence incidents happen.

13 In my eighteen, almost nineteen, years as a
14 grocery worker, I have not once encountered Cal/OSHA
15 enforcement staff at my store. Without an enforceable
16 Cal/OSHA workplace violence prevention standard or
17 intervention from the legislature, nothing will change
18 at my store and we will have to continue to endure these
19 insufferable daily incidents. Employers must be
20 required to provide training to workers on workplace
21 violence, what to do when an incident happens, and what
22 are our rights for post-incident recovery.

23 They should also be required to provide
24 training on how to safely respond in a shoplifting
25 incident. Additionally, employers must look at their

1 staffing levels as a cause for workplace violence
2 incidents occurring in the first place.

3 I strongly urge Cal/OSHA to adopt an
4 enforceable general industry workplace violence standard
5 immediately that is as strong or stronger than the
6 healthcare standard. We have waited six years and
7 cannot wait any longer.

8 Thank you.

9 CHAIR THOMAS: Thank you.

10 Good morning.

11 MS. GONZALES: Good morning.

12 Good morning, Members of the Occupational
13 Safety and Health Standards Board. My name is
14 Marilyn Gonzales. I worked in the drug retail business
15 for six years. I currently work as a shift supervisor
16 at Rite-Aid store in Los Angeles. I'm here today to
17 speak about how workers like myself are exposed to
18 workplace violence every single day.

19 Just to give you an example, sometime in
20 September 2022, around 6:30 p.m., a fellow employee who
21 works in loss prevention was opening a case of
22 merchandise to help a customer. All of a sudden, a man
23 with a gun approached the employee and shot at his head.

24 I was the manager on duty at the time and
25 working at the cash register and heard the gunshot. It

1 was pretty loud. Luckily, the employee ducked and
2 dodged the bullet. As my coworker ran to the emergency
3 exit, he yelled at me to call 911, as the shooter
4 followed him. I could see my coworker's fear in his
5 face. Fortunately enough, he was able to run away and
6 save his life.

7 I immediately called 911 and police officers
8 showed up right away. They evacuated the store, getting
9 out the pharmacy staff and customers, and searched for
10 the shooter, who managed to escape. Everything happened so
11 quickly. With me there were two other cashiers in the store.
12 All of us were in shock, but I was able to take the two
13 cashiers and the loss-prevention employee to the manager's
14 office for safety. At that moment, all I thought about was
15 self-preservation. Of course, I was so scared.

16 Even though I feared for my life, I had to
17 stay strong because my coworkers and customers are under
18 my responsibility. At the time of the incident, there
19 were no security -- security guards, pardon, in the
20 store. The company hired a 24-hour security guard after
21 the incident, but that was for only three days. To me,
22 this is not an effective solution. This is just a
23 Band-Aid.

24 The company provides us with Sprout learning
25 courses. These courses are like self-learning. For

1 example, they expect us to learn about emergency
2 preparedness as well as active threat. In my opinion,
3 these courses are impractical because real-life
4 situations are unpredictable. It would be more helpful
5 if we were trained in active-shooter drills to learn
6 better strategies on how to handle these types of
7 situations. We also need adequate staffing in the whole
8 store, especially at the front area, to serve as -- to
9 serve as a deterrent for shoplifters and to better
10 respond to incidents like this.

11 We also need adequate mental health counseling
12 and time off to process such experiences. The company
13 offered two sessions of counseling, which helped a
14 little bit, but we had to attend those sessions on our
15 own time.

16 Since the incident, I feel anxious going to
17 work every single day. It was a very traumatic
18 experience for me. I am a mother of four. When I got
19 home that night, I didn't tell my children about the
20 incident. I felt that the last thing for them to worry
21 about is my safety.

22 After the incident, management reminded us
23 that this could happen to any of us at any time. And as
24 workers, we're just like -- we need to keep our job, even
25 if we have to risk our lives. It shouldn't be like

1 that.

2 We have asked our company to hire security
3 guards, because as of today we only have guards from
4 12:00 p.m. to 2:00 a.m. and we need -- and we do need
5 security guards from the time we open -- we open the
6 store until we close.

7 Workers like myself shouldn't have to go to
8 work every day wondering whether we're going to make it
9 through the day or whether we'll be leaving work safely.
10 We need a change. My favorite quote is: If not now,
11 then when? It's not tomorrow, not yesterday. It's now.
12 The time is now.

13 I call on the Occupational Safety and Health
14 Standards Board Members to support me and all retail
15 workers to have workplace safety standards in place that
16 protect us and prevent us from becoming another
17 statistic. I am worried another incident like this will
18 happen in my store, but this time myself or my coworkers
19 might be the ones shot and killed and not come home to
20 our families.

21 The California Workplace Violence Prevention
22 standard should protect all workers, including workers
23 in the drug retail industry like myself.

24 Thank you for the opportunity to speak about
25 this matter.

1 CHAIR THOMAS: Thank you.

2 Who do we have next?

3 MR. CHAIREZ: Good morning, Chair and
4 Standards Board Members. My name is Vincent Chairez.
5 I'm a pharmacy technician for CVS and also a shop
6 steward. I'm here to testify on the urgent need and for
7 the general industry workplace violence standard.

8 We have been waiting too long for California
9 to adopt protections for non-healthcare workers. It's
10 been since 2017, and we can't wait any longer.

11 In the community pharmacy setting, we have not
12 only the typical retail theft and transients, but the
13 24-hour store also deals with the threat of life over
14 narcotics.

15 At my store, there was an incident where a
16 pharmacist in her professional judgment denied a script,
17 deeming it tampered. The patients were really abusive,
18 belittling, and threatened my staff and my coworkers and
19 they waited outside. Unfortunately, they had to be
20 escorted outside by the front-of-store employees because
21 management was nowhere to be found. Fortunately, when
22 the pharmacists went outside, the police then were
23 called and then they were escorted safely over to their
24 cars. And those people were eventually taken to jail and
25 were later identified as gang members of a local gang in

1 Carson who had just recently been released.

2 This led to a plea for myself, because I am
3 the shop steward. I got to have a personal meeting with
4 my president, to the executive director of labor
5 relations, Christopher Gitaz (phonetic) -- sorry -- of
6 CVS, requesting security and some kind of protocol for
7 future incidents if this happens. I was told this was
8 too costly, even though my pharmacy has made millions of
9 dollars because of COVID and it will continue to make
10 millions of dollars after.

11 CVS has failed to implement any necessary
12 changes to make sure workplace violence incidents do not
13 happen again. I should not have to live in fear for
14 performing my job or safety for leaving my job because
15 we uphold the pharmacy standards.

16 I strongly urge the Cal/OSHA Standards Board
17 to protect workers and swiftly pass a general industry
18 workplace violence standard so no other worker has to
19 experience workplace violence like my coworkers and I
20 have. Workplace violence is a worker health and safety
21 emergency and needs to be treated like one.

22 Thank you for your time.

23 CHAIR THOMAS: Thank you.

24 We're going to move to the queue for in-phone
25 -- phone calls. So, Maya, who do we have up?

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47

1 MS. MORSI: Up next is AnaStacia Nicol Wright
2 with Worksafe.

3 CHAIR THOMAS: Go ahead.

4 Is it Nicol?

5 MS. WRIGHT: Hello.

6 CHAIR THOMAS: Hello.

7 MS. WRIGHT: AnaStacia.

8 CHAIR THOMAS: Yeah, go right ahead.

9 MS. WRIGHT: Thank you.

10 So, good morning, Board Members and
11 colleagues. I'm AnaStacia Nicol Wright with Worksafe.

12 Firstly, I'd like to -- we'd like to address
13 our concerns on automated agricultural equipment.
14 Labor-replacing autonomous machines may hold out the
15 promise to reduce or eliminate certain agricultural
16 worker safety risks when work sites are secured and no
17 workers are present. But at present, or right now, the
18 technology still presents a wide range of health and
19 safety concerns for workers. Many of these concerns
20 simply can't be overcome, as our modern-day technology
21 still remains susceptible to glitches, signal losses,
22 hacking, et cetera.

23 Technological advancements are unavoidable and
24 they're not always bad for workers. However, we need to
25 incorporate these advancements cautiously, considering

1 what we know are tools that are safe for employees, as
2 opposed to simply what's best for the employers' bottom
3 lines.

4 Autonomous agricultural techs should not be
5 implemented in California until we've brought an
6 appropriate worker safety infrastructure that addresses
7 all the concerns highlighted by our colleagues, like
8 UFCW, CRLA Foundation, and California Labor Federation.

9 Secondly, Worksafe would like to express its
10 support for the lead standard. The proposed draft would
11 safeguard the health and safety of workers by decreasing
12 the safe blood levels by half. It would also give
13 guidance to employers to protect workers based on task
14 so we don't need to rely on air testing only.

15 Lastly, it will ensure that workers get
16 medical testing for lead exposure by qualified
17 healthcare providers.

18 And, with that, that might be the shortest
19 comment I've ever made. So you're welcome and thank you
20 all.

21 CHAIR THOMAS: Thank you.

22 Who do we have next, Maya?

23 MS. MORSI: Up next is Lance Lippincott with
24 City of Fresno.

25 CHAIR THOMAS: Lance, can you hear us? Come

1 on, Lance. Are you there? Apparently not.

2 We'll move to the next, Maya.

3 MS. MORSI: Up next is Kelly Trevino with City
4 of Fresno Economic Development Department.

5 MS. TREVINO: Good morning. Can you hear me?

6 CHAIR THOMAS: Yeah. Go right ahead, please.

7 MS. TREVINO: Lance and I work together. He
8 had to jump off, so I'm filling in for him, so we're
9 good.

10 Good morning. My name is Kelly Trevino and
11 I'm representing the City of Fresno's Economic
12 Development Department.

13 Autonomous technology is no longer the stuff
14 of future tech, but is present in many facets of our
15 everyday life. The California Central Valley and
16 California as a whole has a long tradition of being not
17 just a local or national leader in agriculture but an
18 international trend-setter.

19 Autonomous agricultural technology is the way
20 of the future and helps fill several critical job gaps
21 to the benefit of agricultural production. The Central
22 Valley and California are very well positioned to foster
23 autonomous agricultural technology development and
24 manufacturing.

25 And it is for these reasons that we are

1 expressing our support for an update to Title 8 to allow
2 for the use of autonomous agricultural equipment in
3 California.

4 Thank you.

5 CHAIR THOMAS: Thank you.

6 Who do we have next, Maya?

7 MS. MORSI: This may be a panel comment, but
8 up next is Trent Johnson with Raven Applied Technology.

9 MS. SHUPE: (Unintelligible).

10 CHAIR THOMAS: Yeah, go ahead.

11 MS. MORSI: I'm not sure, but he may have a
12 public comment as well.

13 MS. SHUPE: Just so our commenters --

14 MR. JOHNSON: Hello. Can you hear me?

15 MS. SHUPE: -- are aware, just -- this is
16 Christina Shupe.

17 Just so our commenters are aware, there will
18 be a public comment period opportunity after the panel
19 discussion on autonomous ag.

20 MR. JOHNSON: I'd like to defer 'til after the
21 panel, if that's okay.

22 CHAIR THOMAS: Sure.

23 Can we go to the next, Maya?

24 MS. MORSI: Up next is Robert Moutrie with
25 California Chamber of Commerce.

1 CHAIR THOMAS: Robert, can you hear us?

2 MR. MOUTRIE: Good morning, Chair Thomas. I
3 can. Can you hear me all right?

4 CHAIR THOMAS: Yeah. Go right ahead. A
5 little loud, but we can hear you.

6 MR. MOUTRIE: That's what my friends say, too.
7 So I want to touch on a number of pieces, as
8 we have a lot of balls in the air.

9 I want to associate myself with the comments
10 of Bruce Wick (unintelligible) the lead reg and Helen Cleary's
11 comments. I think she correctly flags the issue with
12 greatly expanding the workplaces covered without -- and
13 lowering the thresholds -- without considering that
14 those smaller workplaces or those different workplaces
15 may have different compliance issues.

16 I will just -- without getting too detailed, I
17 will say my personal example on -- I think we need -- we
18 need more time than the 45-day comment period and some
19 time to discuss this, because the differences in
20 language between 2016 and 2023, I will say personally
21 I've spent ten hours trying to go through and make sure
22 I caught every difference and connected all the dots and
23 how those changes were. And I'm an attorney.

24 And when we're talking -- as Steve Johnson
25 said, when we're talking about something that's clear

1 and understandable for people doing this, this language
2 is not it. And the idea that we've having a big change
3 or a lot of changes to this language and then moving on
4 quickly is really problematic, not just at a lead reg
5 level, but at a policy level of how we move forward. I
6 mean, we need to have clarity, at least a clear red line
7 saying, "Hey, here's what changed from 2016 to 2023," so we
8 can sort that.

9 So that's a huge concern for us, and I would
10 definitely say we need more time to get through those
11 things to make sure we can address the real substance
12 and not just get caught up in what has been changed.

13 I won't reiterate Helen's points, spoken really
14 well, about the issues there are, particularly for
15 employers who have mobile work sites and whose exposure
16 is very brief. I don't think the testing provisions
17 make sense and are actually workable with present
18 testing. I don't think that's the intent, but I just
19 don't think that's been considered, because we need to
20 have a talk about it.

21 I will echo the disappointment of Dave Smith
22 about the first-aid kit regulation. And, Dave, I always
23 appreciate your consistency here.

24 The -- I want to touch on autonomous tractors.
25 I want to applaud the Board for having a discussion in

1 person and trying to work through those issues. I think
2 it's really good to see the Board weigh in on a
3 complicated issue like this and really take a close look
4 at technology. I do think that technology has moved
5 forward, and I couldn't make it any better than what Adam
6 said at the beginning, so I won't add.

7 I do want to touch on an issue, on the
8 shoplifting issue, because this is one that's been
9 raised statewide and is very important and I -- you
10 know, is very complicated and has facets outside of the
11 Board. So I want to touch on it.

12 I cannot speak clearly enough to say that the
13 statewide increase in retail thefts and the related
14 risks is terrible. The business community in Sacramento
15 on the legislative side are working hard to try to get that
16 fixed. We have been trying to get criminal law
17 adjustments, because the problem really comes from three
18 places.

19 First, Prop 47, as many of you know, greatly
20 lowered the criminal penalties around theft and caused a
21 noticeable, dramatic increase in thefts across the
22 state, because criminals just knew "We're not going to
23 get punished for this, so we're going to go in and do
24 it." And that put everyone at risk. I mean, that's not
25 good for us; that's not good for employees. That's

1 what -- we've been trying to get that fixed and address
2 it legislatively. Notably, I don't believe we've had
3 any help on the union side with getting that fixed,
4 which is something we'd love to have.

5 As the suggestion, I think one of the speakers
6 said, of tackling thieves -- and I certainly have the
7 same question, Can we tackle thieves? What can we do?
8 I looked into this, and the problem is you create
9 liability for yourself as a store if you physically
10 touch thieves. So you get in this impossible
11 scenario where the criminal penalties are incredibly
12 low. You can't physically stop them, because then you
13 get sued for something else. And so what do you do?
14 Well, that's the troubling situation we're in there.

15 And I appreciate the comment and actually am
16 quite glad to hear about the rapid police response to
17 the shooting story, because that's terrible. I'm glad
18 the police were there rapidly. But I think the first
19 speaker spoke well when they said that -- I'm sorry I
20 don't recall your name -- the police response often is
21 quite delayed to shoplifting issues. Certainly, that's
22 something that we wish was faster and wish they were
23 there more for. That's a resources problem and I think
24 a criminal punishment problem.

25 I have colleagues who are -- friends who are

1 police and DA's and they'll say, "When criminal penalties
2 are lowered, we don't prioritize that the same way,
3 because we prioritize the ones with the high penalties,
4 murders, you know, those kinds of things."

5 So those criminal law problems that have come
6 out of Prop 47 and have been legislative problems, we
7 couldn't agree more. I mean, we really want to get them
8 addressed and, I mean, I speak for the whole business
9 community. Those are tragic.

10 They are, at their core though, criminal
11 problems that employers can only do so much to work on.
12 We are working in this -- in the regulatory process here
13 and I'm glad to work on the workplace violence reg and
14 have that discussion and work on that law and how to
15 make that something we can do. But I just want to make
16 clear that at the core this is profoundly a criminal law
17 problem that was created by other legal changes that
18 made it too easy and too low-penalty to do these things.
19 And now we are kind of dealing with the echoes of that.
20 And though we can deal with what we can deal with, I
21 just want to make clear we can't deal with all of it.
22 Retailers and businesses cannot be police and so there's
23 limitations there.

24 So that's all I want to touch on that. I
25 appreciate it, and I truly am saddened, and I wish that

1 those criminal enterprises weren't happening, because
2 it's certainly not something we want.

3 Thank you.

4 CHAIR THOMAS: Thank you.

5 So now we're going to continue with in-person
6 speakers, so go right ahead.

7 MS. MORSI: Up next is Matt with TFE.

8 CHAIR THOMAS: Sorry, Maya. Hold that one,
9 because we're going to in-person.

10 MS. MORSI: Oh. Sorry about that.

11 CHAIR THOMAS: That's all right.

12 Please go ahead.

13 MS. DELEON: Hello, everyone. I want to thank
14 the Board, staff, and interpretation for your hard work
15 and for receiving our comments today.

16 My name is Renee Guerrero Deleon. I'm an
17 organizer with the Southern California Coalition for
18 Occupational Safety and Health, otherwise known as
19 SoCalCOSH. And our organization is founded on the
20 principle that workplace deaths and injuries are
21 preventable.

22 I want to start off my public comment today by
23 emphasizing the need for a general industry heat
24 standard. With the rising temperatures each year, it is
25 imperative that we have a heat standard as soon as

1 possible. Each coming year there seems to be a new
2 record of rising heat, yet there lacks updated standards
3 to meet the growing hazards.

4 Secondly, I want to thank all the workers who
5 have testified here today to the importance of why we
6 need to address workplace violence. We at SoCalCOSH
7 urge the standards board to treat workplace violence as
8 a health and safety issue and pass a general industry
9 standard, because every worker deserves a workplace
10 where they feel safe and free from violence in all
11 forms.

12 And, lastly, I want to speak out against the
13 unregulated use of autonomous tractors and equipment
14 that poses a harm to farmworkers across the state.
15 Agricultural work has a track record of failing to
16 protect workers when it comes to maintaining safe and
17 operable equipment.

18 Working conditions should not have to be
19 experimental. There is a real risk that these vehicles
20 pose by failing to account for workplace environments
21 that go far beyond sensors and cameras, and I would
22 like to ask those here today if they would feel
23 comfortable working in those conditions as well.

24 Thank you once again to the Board, staff, and
25 Division for your time and consideration. And we know

1 that you will make the best decision for workers and to
2 protect working-class families. Thank you.

3 CHAIR THOMAS: Thank you.

4 MR. SMITH: Good morning. My name is Derek
5 Smith. I am the political director of the United Food
6 and Commercial Workers, Local 324, which covers Orange
7 County and the southern part of L.A. County. We
8 represent grocery, drug retail workers. We also
9 represent 2,000 workers at Disney, all retail workers.

10 We've relied on Cal/OSHA to regulate and
11 ensure health and safety standard for our retail
12 workers. And this morning I want to speak to you about
13 the increased prevalence of workplace violence in the
14 retail industry and the critical need to establish clear
15 standards in this area.

16 Recently, we had an informal poll of our
17 stewards, about 300 of them, and about 75 percent had
18 personally experienced some form of workplace violence
19 -- maybe verbal abuse, physical abuse, including assault
20 or being spit on. The specific examples have been
21 explained to you more eloquently than I could here
22 today.

23 This customer behavior has been exacerbated by
24 the stress of the pandemic, but I think it would be a
25 mistake to think that it is exclusive to the experience

1 of the pandemic. It is going to continue.

2 Often, these are low-key events in the
3 operation of a grocery store. Workers are told to get
4 back to work. There's no tracking. There's no training
5 on how to resolve an issue like this more effectively
6 and there's no consequences for the offending
7 instigator.

8 Due to state legislation, we can tell you with
9 a high degree of accuracy how many COVID cases occur in
10 any kind of grocery store. We know where they are, when
11 they are, and we know where the clusters are. This
12 allows us to be effective advocates for our members in
13 this area. No such tracking exists in the case of
14 workplace violence.

15 The when, the where, the manner that they're
16 happening, the increased frequency that they're
17 happening, in what form the violence is taking, no
18 protocols exist about the best ways to abate violence.
19 No training exists to inform workers about protocols,
20 how to defuse situations, how to best employ security
21 that exists. And in the case, the very dramatic case,
22 of active shooters, which we also know is on the
23 rise, there's no training on how to protect themselves
24 in that very dramatic incidence. And we urge Cal/OSHA to
25 create clear standards to protect our members and we need

1 established accountability to ensure that these -- the
2 employers are taking it seriously.

3 With due respect to the speaker from the
4 Chamber of Commerce, this is not a criminal-justice
5 issue. This is not even just a shoplifting issue. I
6 told you that 75 percent of our members, based upon an
7 informal survey of stewards, but that isn't appropriate
8 either. I don't think the retail establishments could
9 tell you with any further degree of accuracy how these
10 incidents are. This has got to change. I hope at
11 their next stewards' conference that we have that we
12 actually can get those numbers so that we can really do
13 the job and you all can do the job that you're meant to
14 do.

15 So thank you very much.

16 CHAIR THOMAS: Thank you.

17 Before we have our next speaker, how many
18 other people in the room intend to speak? See hands?

19 Okay. All right. So we're going to do you
20 two and then we'll go to the phone lines.

21 Maya, how many do we have on the phones?

22 MS. MORSI: We have one, two, three -- four.

23 CHAIR THOMAS: Okay.

24 MS. MORSI: Sorry. Five.

25 CHAIR THOMAS: Okay. So we'll -- we'll do

1 these last two and then we'll go to the phones.

2 Go ahead. Thank you.

3 MR. NAPIER: Good morning. This is
4 Dan Napier. I'm a certified industrial hygienist and my
5 interest is in the current revisions to the lead
6 standard.

7 And I would ask the Board -- I will be making
8 comments and written comments, but I would agree with
9 all the previous speakers. We need more time on some of
10 this. Some of the issues are -- are highly technical.

11 People seem to forget, but lead is ubiquitous.
12 It's around us. It is in the soil. EPA did a study
13 several years ago. California soils have between
14 4 and 200 micrograms per -- or parts per million of lead
15 in the soil, 4 to 200. Notice, there's no zero.

16 And the current lead standard is perilously
17 close to what we would call background, and there's
18 also not any language in the current standard that says,
19 When do we stop? When is there no lead?

20 You can look at, for example, a modern office
21 building. There's very small amounts of lead in the
22 wall there. Does that mean that every construction
23 site, every job, has to have all of this lead standard
24 built into it? There's no bottom-line number. We need
25 to have that in the standard. We need to be able to

1 say, "All right, this is background or this is normal."

2 And the other thing that we need more time on
3 is, I think, some of the toxicology needs to be looked
4 at more carefully. And the studies that are in use and
5 some of the levels are extremely low. A NIOSH study --
6 average blood lead is real close to one. And we're
7 talking about -- that's just everybody. That's
8 everybody in this room, everybody in the world.

9 Well, is it appropriate then to have a
10 standard of two? It's perilously close to what's in the
11 environment.

12 Dan Napier. Thank you very much.

13 CHAIR THOMAS: Thank you.

14 MR. JERGENS: My name is Jeff Jergens. I
15 represent the Association of Equipment Manufacturers.

16 Chairman Thomas, thank you for allowing me to
17 speak today. We appreciate the opportunity.

18 And we are in agreement with several of the
19 comments mentioned earlier today. We want to make sure
20 that there are appropriate safeguards and benchmarks put
21 in place when we introduce autonomous regulation -- or
22 autonomous equipment into the field. And we feel
23 that the best way to do that is to establish an advisory
24 committee so that we can then discuss the appropriate
25 safety regulations for that equipment.

1 As this discussion has begun half a decade ago
2 and everybody might not be up to speed, I thought
3 it would be good to mention some of the comments that
4 were made through the previous petitions.

5 There were at least eight mentions through the
6 first two petitions that implied there's difficulty
7 applying the current regulation to autonomous equipment.
8 For example, it is unclear how Subsection 3441 and other
9 regulations would apply to a remote operator. The
10 technologies mentioned in the existing regulation
11 addressed traditional tractors, where an operator sits
12 at the seat on top of the tractor to address the machine
13 controls. And employers would experience difficulty
14 trying to comply with the mismatched regulations.

15 So in answer to that, staff has also
16 recommended that we establish an advisory committee
17 among stakeholders to include petitioners to identify
18 the issues and address those issues and convene an
19 advisory committee to amend that regulation.

20 So we understand maybe at the time it wasn't
21 the appropriate action to take, is establish a committee,
22 but we definitely feel that that is the appropriate
23 action to take now, to establish a committee.

24 Also, to just kind of recap a little bit,
25 autonomous equipment began working approximately 2007.

1 However, Title 8 was last modified 46 years ago. For
2 perspective, 46 years is the same timeframe from the
3 first Model T to the first Univac computer. And,
4 according to encyclopedia.com, those computers inspired
5 anxiety in many who viewed computers as bewildering,
6 frightening machines that had the potential to run amok.
7 I think we've heard some similar comments now.

8 As witnessed by this body, many of these folks
9 a few years -- or a few weeks ago -- at the Con Ag Expo
10 -- and we thank you so much for your willingness to
11 proactively see what's out there in the field. You can
12 see that Cal/OSHA can no longer disregard this equipment
13 and is necessary to make revisions to the regulatory
14 framework that recognizes this equipment can operate
15 safely.

16 Five years ago there wasn't a whole lot of
17 data available as far as this equipment is, but today
18 there is a dearth of it. For example, there are a
19 minimum of 47 manufacturers producing autonomous
20 equipment currently. Of those 47 manufacturers,
21 31 models do not have an operator station. So we can no
22 longer say having an operator along with autonomous is
23 applicable. Eighteen of those machines are electric, which
24 align very much with California's push towards
25 sustainability. Five of those machines are solar, which

1 also alleviate the strain on the grid. Eight of those
2 machines mechanically remove weeds, which align with
3 DPR's roadmap of eliminating chemicals. And nine of
4 those manufacturers are California based, employing
5 California workers.

6 So of those machines that are willing to share
7 their data, there are over 500 machines currently
8 working in the fields covering over one million acres
9 of farmland, working in over 40 countries around the
10 world, accumulating over 350,000 safe-use hours. Or, if
11 you break that down into 2,000 hours a year that
12 equipment typically works, that's 175 years of safe use,
13 or that also equates to 58 three-year variances in data
14 acquisitions. So we can no longer say that we don't
15 have the data to support the safe use of the equipment
16 either.

17 Coming up in this meeting, there's going to be
18 a panel going forward represented by stakeholders, and we
19 applaud the Board again for putting that together and
20 taking those proactive steps. Of those five groups of
21 stakeholders, staff and academia have advised
22 establishing an advisory committee, the growers and
23 manufacturers are requesting establishing an advisory
24 committee, and labor has commented that they haven't
25 been properly engaged, and an advisory committee is

1 also the perfect place to do that.

2 So, in conclusion, I just want to say we thank
3 you for this opportunity and we strongly emphasize that
4 this Board convene an advisory committee so we can begin
5 work on this. It began five years ago, and it's probably
6 seven years out before we get a regulation put in place.
7 We're talking about 12 years since we've started this
8 process. So we definitely believe the time is now, and I
9 thank you for your time.

10 CHAIR THOMAS: Thank you.

11 So I just want to make sure. We have no more
12 in-house speakers in person? All right. I don't see
13 any others.

14 So, Maya, who do we have on the line?

15 MS. MORSI: Up next is Matt with TFE.

16 CHAIR THOMAS: Matt, can you hear us? Hello,
17 Matt? So I guess Matt's not there.

18 Go to the next, please, Maya.

19 MS. MORSI: Up next is Chris Zeitz with Fresno
20 County Economic Development Corporation.

21 CHAIR THOMAS: Chris, can you hear us?

22 MR. ZEITZ: Yes, I can. Can you hear me?

23 CHAIR THOMAS: Yes, we can. Go right ahead.

24 MR. ZEITZ: So I had actually -- I thought I'd
25 submitted to speak after the panel on ag vehicles. So

1 would I be able to wait 'til then?

2 CHAIR THOMAS: Yeah, you would.

3 MR. ZEITZ: Okay. Great. I am done for now
4 then. Thank you.

5 CHAIR THOMAS: All right. Thank you.

6 Who do we have next, Maya?

7 MS. MORSI: Up next is Travis West with
8 California Nurses Association.

9 CHAIR THOMAS: Travis, can you hear us?

10 MR. WEST: I can, yeah. Can you hear me?

11 CHAIR THOMAS: Yeah. Go right ahead, Travis.

12 MR. WEST: Wonderful.

13 Good morning, everyone, and thanks to Board,
14 staff, and everyone else here for the opportunity to
15 comment. My name's Travis West. I'm a regulatory
16 policy specialist here with California Nurses
17 Association.

18 I wanted to state that CNA aligns itself with
19 the comments of the UFCW, its members, SoCalCOSH, and
20 others on the workplace violence prevention standard for
21 general industry. We've heard some pretty harrowing
22 stories this morning that make the need for a general
23 industry standard pretty clear, and we feel strongly that
24 this is a workplace safety issue and not just a
25 criminal-justice issue.

1 We, therefore, believe that the -- the workplace
2 violence general industry standard should be just as
3 comprehensive and protective as the standard for the
4 healthcare setting. You know, of course, all workers
5 deserve strong protections from violence on the job,
6 you know, and by way of example, this -- you know, the
7 workplace violence prevention standard should be in
8 effect at all times and it must be tailored to the
9 specific hazards of each workplace so that it's, you
10 know, location specific.

11 Workers and their representatives should also
12 be actively involved in all parts of the development,
13 the implementation, and the annual review of the
14 workplace violence prevention plan, including hazard
15 assessment, because they're the ones that are most --
16 most situated to determine what are the hazards that are
17 most relevant, you know, on the day-to-day basis.

18 Workplace violence general industry standards
19 should use the healthcare standard as a model for
20 effective ongoing protection and prevention of workplace
21 violence across industries.

22 Thank you so much for the opportunity to
23 comment.

24 CHAIR THOMAS: Thank you.

25 Who do we have next, Maya?

1 MS. MORSI: Up next is Scott with Fresno
2 Chamber of Commerce.

3 CHAIR THOMAS: Scott.

4 MR. MILLER: Hi. Thank you for -- thank you
5 for the opportunity to make a couple of comments.

6 I just wanted to speak very briefly on the
7 update of Title 8, hopefully, and to mention how crucial
8 autonomous agriculture is to our region. Such a huge
9 percentage of the world's food comes from a hundred
10 miles from where I'm -- within a hundred miles of where
11 I'm sitting right now, and we simply don't have enough
12 tractor operators to meet the demand right now.

13 And, furthermore, we believe that the -- that
14 ag technology and autonomous ag tech will greatly
15 increase worker safety by simply removing them from the
16 areas where the -- where the work is occurring. The work
17 being done by machines will remove people from the
18 noise, dust, chemical spray, heat stroke, et cetera.

19 And upholding Title 8 to create some
20 common sense standards for what is not just coming --
21 it's here, globally, and it's in use everywhere -- not
22 everywhere, but it's in use in so many places and has
23 such a great track record. We really encourage you to
24 look at updating this standard, and to do it for all the
25 right reasons, not just for worker safety, but to -- to

1 improve the economy of the center of California that
2 absolutely needs it.

3 So thank you very much. And most of the
4 speakers who've spoken on this topic are so much more
5 articulate than I am, but it is -- it is so crucial to
6 the economy of the Central Valley.

7 Thank you very much.

8 CHAIR THOMAS: Thank you.

9 Who do we have left, Maya?

10 MS. MORSI: Up next is Hector Saldivar with
11 UFCW Work Forward.

12 CHAIR THOMAS: Hector, can you hear us?

13 MR. SALDIVAR: Yes, I can hear you. Can you
14 hear me?

15 CHAIR THOMAS: Yeah, go right ahead.

16 MR. SALDIVAR: Hello. Good morning, everyone.
17 My name's Hector Saldivar. I'm with United Food and
18 Commercial Workers Work Forward. We're the workforce
19 development arm of the UFCW. I am a workforce
20 coordinator. And one of the goals -- or a main goal of our
21 organization is to provide training and development of
22 our current members as well as future members,
23 specifically the retail industries, healthcare, to
24 develop their skills and in order to create -- in order
25 to have better jobs and increase their benefits, their

1 wages, and standards.

2 And one of the key aspects of a good job is
3 being safe, feeling safe and being safe at the
4 workplace. So we -- I'm speaking in support of passing
5 swiftly the general industry workplace violence
6 standard. We believe that this standard and the
7 accompanying training that would come along with it will
8 help our workers feel safer at work.

9 As you've heard from many workers in the
10 retail industry earlier this morning, the stories,
11 really just terrible stories of what's happened with
12 workers who are threatened as well as unfortunate deaths
13 that happen at the workplace, we believe that the
14 standard is imperative and it's needed as soon as
15 possible to support workers when they're at work.

16 From my personal perspective, where I used to
17 be a retail worker when I was in college and I
18 witnessed multiple shoplifting as well as armed
19 robberies -- and I remember one of the shoplifting that
20 happened; I think the store manager was there. And at
21 the end, one of the retailers ran after the shoplifter.
22 And when they returned -- I think it was for, like, a
23 six-pack of beer, something very small, and the
24 store manager, all he said was, "Next time, just let them
25 go." Right? That was the extent of the training.

1 I remember I was there when the armed robbery
2 happened, and I remember it took a while for the police
3 to show up. And afterwards, there was no training, no
4 debrief, nothing that happened, like I said, "Hey, if
5 this happens again, here's what we need to do." And there
6 was multiple other robberies with knives, and not once
7 do I recall their having any kind of training to prevent
8 this or what to do.

9 And this is not just a safety issue for the
10 workers, but also for the general public, as there's
11 multiple customers all the times, right, when these
12 different robberies and shoplifting occur.

13 So, again, I'm urging the Board to pass a
14 general industry workplace guidance standard as soon as
15 possible with strong components on training and
16 specifically giving, at a minimum, yearly trainings, not
17 one training when you're hired and then -- and then
18 whatever happens down the line, if something were to
19 happen.

20 So really emphasizing how crucial it is. It's
21 part of a good job to have the standard and to have
22 regular trainings that are worker-informed,
23 worker-based, because the workers that experience these
24 -- these incidents at work are the ones that have a lot
25 of times some of the best solutions for it.

1 Thank you for your time.

2 CHAIR THOMAS: Thank you.

3 Who do we have left, Maya?

4 MS. MORSI: We have two more. The next one is
5 Mitch Steiger with California Labor Federation.

6 CHAIR THOMAS: Mitch, can you hear us?

7 MR. STEIGER: Yes. Thank you, Chair Thomas,
8 other Board Members, and staff. I appreciate the
9 opportunity to speak today.

10 We'll just speak very quickly on lead and
11 workplace violence.

12 Regarding lead, we would echo the comments of
13 Worksafe and urge the Board to adopt the standard -- the
14 update, when it's before you.

15 One of the first things that I did when I came
16 to work at the Labor Federation in 2010 was attend a
17 training on the need to update the lead standard and
18 learned a lot about it. I learned a lot of very scary
19 things of the effect that lead can have on the body, but
20 also learned that this is a hazard we've known about for
21 thousands of years. The Romans knew how harmful lead
22 was. And we've been working for a very long time to
23 update this standard.

24 Yes, it's thorough. Yes, there will need to
25 be some work to make sure that employers understand all

1 of its provisions and all the different ways that it can
2 reach out and help workers. But that is not a reason to
3 delay it. We absolutely need to take action. What we
4 have right now isn't enough and we urge the Board to
5 adopt that when it eventually does come before you.

6 Regarding workplace violence, the stories from
7 the workers that you've heard today really tell you
8 everything that you need to know about how serious this
9 hazards is, and it's getting much worse very fast. And
10 anyone who shops in a business that can't lock its doors
11 has probably seen it. You don't even need to work in
12 the industry to know how bad this problem has gotten.

13 And it would seem that our regulatory
14 infrastructure -- the infrastructure we have in place to
15 protect workers from this hazard reflects a bygone era
16 when we really didn't have to worry about this all that
17 much. And I don't think anyone can deny how serious
18 it's gotten. We may disagree a little bit on what the
19 fundamental causes of it are, but the reality is that
20 it's out there and workers are getting shot at, they're
21 getting shot, they're getting stabbed, they're getting
22 attacked, they're getting sprayed with items that are
23 stolen from the shelves. It's getting so out of hand so
24 fast, that we need to do something. And we need to do
25 something more, frankly, than what's in the discussion

1 draft that's out there right now.

2 This data that we adopt needs to look more
3 like the healthcare standard. It needs to go much
4 farther, and it needs to provide much greater clarity for
5 both employers and workers on what we can do to better
6 prevent this from hurting workers, because it is just
7 everywhere; it is part of work now. And we need to do
8 whatever we have to to make sure that we minimize its
9 role in some of these public-facing jobs right now.

10 And those are our comments. And we have a lot
11 to say about autonomous tractors, but we'll respect the
12 process and make those later, at the appropriate time.

13 Thank you.

14 CHAIR THOMAS: Thank you, Mitch.

15 Who do we have next? This is the last one,
16 Maya?

17 MS. MORSI: Yes. And then I can go back to
18 the ones that didn't get called -- that didn't pick up
19 last time, if you'd like.

20 CHAIR THOMAS: All right, we'll do that.

21 MS. MORSI: So up next is Christopher Lee with
22 United Contractors.

23 CHAIR THOMAS: All right. Go ahead, caller.

24 MR. LEE: Good morning --

25 CHAIR THOMAS: Good morning.

1 MR. LEE: -- Chair Thomas, Board Members, and
2 staff. I represent United Contractors, Wall and Ceiling
3 Alliance, Northern California Allied Trades, and the
4 Painting and Decorating Contractors of California. I
5 would note that all the members of those associations
6 are union signatories.

7 With regard to the proposed revisions of the
8 lead standard, we support the comments and concerns
9 expressed by Bruce Wick, Steve Johnson, Helen Cleary,
10 and Rob Moutrie. I won't go over the details, since
11 they've already provided that information.

12 But, in particular, we respectfully request an
13 extension of the comment period, the convening of an
14 advisory committee meeting, and the need to clarify
15 language. We look forward to submitting formal written
16 comments and in participating in the April 20 Board
17 Meeting.

18 Thank you very much for your time.

19 CHAIR THOMAS: Thank you.

20 Who do we have next, Maya?

21 MS. MORSI: So I was circling back to Mike
22 with Vino Farms, LLC.

23 CHAIR THOMAS: Mike, can you hear us?
24 Michael, going once. Going twice. gone.

25 All right. Next?

1 MS. MORSI: Next again is Amber Fowler with
2 Agtonomy -- Agtonomy.

3 CHAIR THOMAS: Amber, can you hear us? Amber?
4 Gone.

5 Next.

6 MS. MORSI: Okay. Lance Lippincott with City
7 of Fresno.

8 CHAIR THOMAS: Lance, can you hear us?

9 MS. SHUPE: (Unintelligible).

10 CHAIR THOMAS: Oh, that's right. Okay. So
11 we're going to skip Lance.

12 Is there anybody else?

13 MS. MORSI: And last one is Matt with TFE.

14 CHAIR THOMAS: Matt, can you hear us? Yeah, I
15 don't think so.

16 Anybody else? That it?

17 MS. MORSI: That is it.

18 CHAIR THOMAS: Yay. We made it. All right.
19 Not that we don't invite and like public comment; we
20 love it. I don't know -- yeah, it's the same thing with
21 the -- every month as you get -- the first one, usually
22 they never answer and then after that we kind of pick it
23 up, but the -- you know, it's a crap shoot. You don't
24 know.

25 Anyway, so we thank you very much for your

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78

1 comments and the -- hold on just a second. I got to get
2 to my notes here. Yeah. Thank you. We appreciate your
3 comments, and we really do. It's insightful, and it helps
4 us, and we appreciate it. The public meeting is adjourned
5 and the record is closed.

6 We will go to the business meeting. The purpose of
7 the business meeting is to allow the Board to vote on
8 matters before it, to receive briefings from staff
9 regarding the issues listed on the business meeting
10 agenda. Public comment is not -- is not accepted
11 during the business meeting unless a Member of the
12 Board specifically requests public input.

13 So proposed variances for adoption.

14 Ms. Gonzalez, will you please brief the Board?

15 MS. GONZALEZ: Thank you, Chair Thomas, and
16 good morning, Board Members. For your possible adoption
17 and approval today, we have Docket Nos. -- well, we have
18 decisions, proposed decisions 1 through 42.

19 CHAIR THOMAS: All right, so decisions 1
20 through 42. Do I have a motion to adopt?

21 MS. LASZCZ-DAVIS: I so move.

22 CHAIR THOMAS: Do I have a second?

23 MS. STOCK: Second.

24 CHAIR THOMAS: I have a motion and second.

25 Are there any questions?

PUBLIC MEETING AND BUSINESS MEETING

1 Hearing none, Sarah, can you please call the
2 roll? And can we get the Board Members back up on
3 the screen?

4 MS. MONEY: So I have Ms. Laszcz-Davis as the
5 motion. And who was the second? Kate, okay.

6 CHAIR THOMAS: Thank you.

7 MS. MONEY: Okay. Here we go. Ms. Burgel.

8 MS. BURGEL: Aye.

9 MS. MONEY: Ms. Crawford.

10 MS. CRAWFORD: Aye.

11 MS. MONEY: Mr. Harrison.

12 MR. HARRISON: Aye.

13 MS. MONEY: Ms. Kennedy.

14 MS. KENNEDY: Aye.

15 MS. MONEY: Ms. Laszcz-Davis.

16 MS. LASZCZ-DAVIS: Aye.

17 MS. MONEY: Ms. Stock.

18 MS. STOCK: (Unintelligible).

19 MS. MONEY: I'm sorry?

20 MS. STOCK: Aye. Aye.

21 MS. MONEY: Chairman Thomas.

22 CHAIR THOMAS: Aye.

23 Motion passes.

24 And Division update. Mr. Berg, will you
25 please brief the Board?

1 MR. BERG: All right. Thank you very much,
2 Board Members.

3 The briefing on the rulemaking we're working
4 on, so first is lead. Proposed rulemaking prevent lead
5 poisoning in workers was noticed this past March 3rd,
6 and the 45-day comment period runs through April 20th
7 when there will be a public hearing at the next
8 Standards Board meeting.

9 And then on the Standard Boards website,
10 there's all the details on how to submit public comments
11 and all the rulemaking documents, and I'll speak more about
12 this at the next meeting during the public hearing.

13 Indoor heat is the next one. The proposed
14 rulemaking to prevent indoor heat illness will be
15 noticed on March 31st. The 45-day comment period will
16 run through May 18th, and, again, there will be another
17 public hearing at that May Standards Board meeting. And
18 I'll speak more about that during that --
19 that meeting.

20 Preventing silicosis from engineered-stone
21 fabrication. Cal/OSHA is meeting frequently --
22 frequently and regularly with CDPH to discuss some
23 necessary regulatory changes to control the silicosis
24 outbreak.

25 Aerosol-transmissible diseases, Section 5199.

1 There's rulemaking to add COVID-19 to the list of
2 airborne infectious diseases and also include COVID as
3 one of the vaccines that is offered to workers. So that
4 is completed and under internal review.

5 Next is trichloroethylene permissible exposure
6 limit update to Title 8, Section 5155. That's been sent
7 to Board staff for their review.

8 For first aid, Cal/OSHA will work with the
9 Standards Board staff to restart the rulemaking.

10 Workplace violence. We're working to update
11 the draft text to be posted online and then schedule
12 another advisory meeting. So that will be coming up.

13 And I appreciate all the comments today. I
14 used to work at a 7-Eleven and had personal experience
15 with workplace violence and it was very traumatic to me,
16 too. And I had no training and there was no security
17 guard. So I sympathize greatly with the people talking
18 today.

19 Next is the COVID-19 non-emergency regulation.
20 CDPH changed a couple things in their orders, which
21 automatically changed the regulation. So on March 13th,
22 we updated our FAQs on our website. That kind of
23 explained those. So please see those FAQs for details.

24 And that's -- that's my update. Thank you.

25 CHAIR THOMAS: Thanks.

1 Are there any questions for Mr. Berg from the
2 Board? Chris?

3 MS. LASZCZ-DAVIS: Yeah. I've just got a -- I
4 don't know whether a questions or comments, but bear
5 with me here.

6 You know, as I listened to the comments this
7 morning, you know, we've really dedicated our comments
8 so far to heat illness, workplace violence, and lead.
9 And I know we'll be dealing with the autonomous
10 equipment issue here shortly.

11 But the one thing that strikes me is that
12 while the regulatory standard is absolutely critical, I
13 mean, I think the thing that really pushes this is
14 education, good education. It's got to be understandable.
15 It's got to be distributed properly and widely. But there
16 also needs to be an advisory committee process that enables
17 Division staff to create a regulation that is
18 understandable in the public domain.

19 And I don't know if it's my ignorance on this
20 part, I don't know whether or not we have good, robust
21 advisory committee processes for indoor heat illness,
22 workplace violence, and lead at this point in time. But
23 it seems to me that, if we don't, we must have those.
24 And, I mean, the only way those get to be more palatable
25 and understandable in the public domain, in the

1 workplace sector, is if enough people can engage and
2 clarify things so that when the final product is out for
3 distribution, it's understandable, enforceable, and
4 executable. So the education piece worries me. And I know
5 we made those comments during COVID as well. That's --
6 that's a huge one.

7 The other comment that I heard -- and I don't
8 know to what extent this can be applied, but I think
9 it's an important one. Generic standards are good.
10 They're good starters. But, given the different
11 workplace sectors and work environments, you really got
12 to begin to customize them. So, if we're dealing with a
13 standard with impact, I'm assuming we understand enough
14 about the impact in different workplaces that we can
15 focus on those with the highest risk, if you will, and
16 begin to customize some of those.

17 I think that's all I have at this point. But
18 my real question -- I guess the parting question for my
19 comments: Do we have advisory committee processes set
20 up for heat illness, workplace violence, and lead at
21 this point in time?

22 MR. BERG: Yeah. We had several advisory
23 committees for lead, indoor heat illness, workplace
24 violence. We're scheduling more for workplace violence.

25 MS. LASZCZ-DAVIS: And I know what I heard

1 pretty frequently was that, given the complexity of some
2 of the upgrades in the standards, that we needed a
3 longer comment period. I mean, given our process on the
4 Standards Board, is there an opportunity for a longer
5 comment period for the public and workplace?

6 MR. BERG: Yeah. I have to bring that up with
7 the Chief and Director.

8 MS. LASZCZ-DAVIS: I'd like you to consider
9 that.

10 MR. BERG: Okay.

11 MS. LASZCZ-DAVIS: I think it's pretty
12 important. If we're, in fact, going to anchor the
13 regulatory system with good, solid regulations that are
14 understandable and enforceable and executable, seems to
15 me we need a broad -- a longer comment period other
16 than 45 days.

17 MR. BERG: Okay. I'll bring that up with them
18 and --

19 MS. LASZCZ-DAVIS: Thank you.

20 MR. BERG: -- discuss it.

21 CHAIR THOMAS: Thank you, Chris.

22 Any other questions for Mr. Berg from the
23 Board?

24 MS. STOCK: This is -- this is Laura. I can't
25 tell whether anybody on the -- there was also wanting to

1 speak. I just wanted to note that I have a few
2 questions and comments.

3 CHAIR THOMAS: It's never stopped --

4 MS. STOCK: So it's okay.

5 CHAIR THOMAS: -- you before, so go right
6 ahead.

7 MS. STOCK: Okay. I didn't want to --

8 See, if somebody else was preparing, I just --
9 too small on the screen to see if that's the case.
10 So -- so, yeah, I want to make a couple of comments.

11 And, first, I wanted to say I, of course,
12 completely agree with the comments by Bruce Wick that
13 education and outreach is critical and that any time we
14 pass a new regulation, particularly one as complicated
15 as lead, you know, I support the idea that the more we
16 can get the Division and other -- other groups aboard,
17 when appropriate, to be in place with clear instructions
18 and training and fact sheets. It's really, really
19 important. So I -- I wanted to just add my voice to
20 that, as he had asked.

21 I think we also agree that education is
22 necessary but not sufficient. We need enforceable, real
23 regulations.

24 And I feel like, you know, a common theme of
25 what I heard from both workers who testified as well as

1 employers is just the concern about the delays and how
2 long this process takes. And just hearing that heat has
3 been in the works for over six years, lead for multiple
4 decades, you know, first-aid was supposed to be on the
5 agenda and then it was not on the agenda and now we
6 hear Eric saying that process needs to be restarted.

7 So I -- I just share the frustration of the
8 public that the process is so -- it takes so long.

9 And I wanted to just -- I have a couple of
10 comments. But before I get there, I just wanted to ask
11 Eric -- and sorry that these questions always have to go
12 to you because you're the person here representing the
13 Division, but can you actually provide a little bit
14 more context about why there are -- what is the issue
15 with these delays and what is needed to accelerate some
16 of our work? Is it a question of resources? Is it a
17 question of priorities in terms of where people -- and
18 how are those priorities set?

19 So, you know -- and, for example, we heard
20 last month that the indoor heat regulation, we now
21 know -- it's great to see that there's a date for the
22 public hearing, but we know, as you described or as
23 someone described last month, it's going to be a full
24 year at least before we get a regulation that we're able
25 to vote on. So we know we are going to completely miss

1 this season of intense heat.

2 So I wanted to ask -- I have a few comments
3 about workplace violence, but, first, could you provide
4 your insight or what you think would be needed in order
5 to address some of these delays?

6 MR. BERG: Sure. I think there's a lack of
7 understanding the amount of work that goes into a
8 regulation. I mean, it's thousands of person-hours or
9 more for the economic analysis for all the supporting
10 documentation. So I just -- and it's not seen by the
11 public, but there's just an enormous amount of work that
12 goes behind this.

13 And we do have a small staff. So, I mean,
14 we're all working more than full-time trying to get this
15 done, you know; we're working weekends and working
16 nights and doing the best we can, but the public just
17 doesn't see how much work goes into these things.

18 CHAIR THOMAS: Well, I have one --

19 MS. STOCK: Yeah.

20 CHAIR THOMAS: I have one question regarding
21 that and then we'll go back to you, Laura.

22 MS. STOCK: Sure.

23 CHAIR THOMAS: Does it usually always get hung
24 up on how much is this going to cost?

25 MR. BERG: I mean, the economic analysis is

1 challenging. And we're in the process of hiring more
2 people and getting more capacity to do this, so that's
3 -- that should help for the future, but, you know, that
4 takes time to get them up to speed and do all that work.
5 So we are working on solving that problem. But, yeah,
6 that's -- that's one of the big hurdles is the economic
7 analysis.

8 CHAIR THOMAS: Yeah. And I think -- I think
9 we've all known that and it's -- when I first started --
10 and I don't think it was really spitballing, but it was
11 just like okay, it's going to be -- "We think it's going
12 to be about this much." And there was -- it was more
13 detailed than that. But now it's really down to where
14 that is the longest part of getting any regulation
15 passed is, "How much is it going to cost? Is it going to
16 be over this amount?", you know, and then what?

17 So I understand what we're going through. I
18 don't always appreciate it, because we know we need to
19 get these regulations done, but that's just one of the
20 main problems that we have getting any regulation passed,
21 is what is the cost.

22 Anyway, go ahead --

23 MS. STOCK: I just had one response to that.

24 CHAIR THOMAS: Sure.

25 MS. STOCK: A good example. I was looking at

1 the outdoor heat regulation that was done over 15 years
2 ago. Economic analysis was about one sentence, and for
3 indoor heat it's well over a hundred pages. So you can
4 see the change in the quantity of work for doing very
5 similar work.

6 CHAIR THOMAS: Yeah. I mean, it's -- you're
7 just doing what we ask you to do is to, you know, define
8 everything, lay it all out. But then that causes other
9 problems, too. So, Laura, you had another question?

10 MS. STOCK: Yeah, yeah.

11 And just on that economic analysis -- and
12 thanks for bringing that up, Dave, because I think that
13 is a big issue.

14 And I know that there have been proposals over
15 the last year about how to accelerate that process, but
16 I want to ensure that it gets started quickly. I know
17 there's been some discussion -- and maybe this is still
18 happening -- to try to hire in-house people to do that
19 and whether or not that process, instead of taking a
20 year, could take several months.

21 I think there's been, also, some discussion
22 about how appropriate? When is it necessary? Obviously,
23 in setting occupational safety and health standards,
24 there's advisory committees and many other processes
25 that help determine what the impact is going to be, and

1 maybe therefore a long additional economic analysis may
2 not be needed. So I think that is definitely something
3 to look at.

4 And, Eric, of course, you know, completely
5 aware of the workload that -- that Board staff and
6 Division staff are under. I know we've -- we've all
7 often spoken that we would want to lend our support for
8 the need for additional resources for both the Division
9 and the Board to develop these regulations. So I
10 recognize that.

11 And I can just understand from the stakeholder
12 community that have been facing these urgent situations
13 like workplace violence specifically and waiting year
14 after year after year after year, you know, and whether
15 these are the kind of situations that may lead people to
16 feel like the way that people need to proceed is either
17 by sort of legislative mandates or by emergency
18 regulations, because something needs to be done.

19 I wanted to just mention -- I wanted to thank
20 all the workers who came to testify in person and on the
21 phone about your experiences. And I just want to
22 emphasize that -- we can't over-emphasize how important
23 your stories are.

24 When we hear what's going on actually in the
25 workplace, it becomes absolutely impossible for anyone

1 not to see that this is an urgent situation it's an
2 urgent occupational safety and health issue that
3 employers must respond to.

4 And I agree that, while, you know, issues
5 around criminal -- you know, there are criminal issues
6 involved, as we heard from Rob Moutrie, this is also a
7 workplace health and safety hazard. It's a
8 responsibility of employers to put in place mechanisms
9 to protect people in the job -- on the job, training,
10 security, et cetera. So there are many, many urgent
11 things that employers need to do and must do.

12 But, again, thank you so much, those of you
13 who came to tell your stories. And I hope you'll
14 continue to do that as we move forward, because your
15 voices are really essential.

16 Thank you.

17 CHAIR THOMAS: Thank you, Laura.

18 Any other questions from Board Members?

19 MS. BURGEL: Dave, this is Barbara.

20 CHAIR THOMAS: Go ahead, Barbara.

21 MS. BURGEL: Okay. I want to just echo
22 Laura's concerns and I wanted to thank the retail
23 workers about their first-person accounts experience of
24 violence.

25 And I'm wondering, Eric, would it be effective

1 to add more resources, obviously, at Cal/OSHA? But if
2 workers were to call in anonymous complaints and just
3 starting to flood the phone lines at Cal/OSHA, reporting
4 high-hazard conditions in retail, that are -- you know,
5 of course, could be covered if employers were using the
6 general industry hazard to -- you know, it is the
7 employer's responsibility to provide a safe and healthy
8 workplace, and employers appear not to be doing that.

9 And so would anonymous complaints to the
10 Cal/OSHA work site liberate more resources?

11 MR. BERG: Oh, yeah. We always encourage
12 workers to file a complaint if they feel unsafe in the
13 workplace. We always encourage that, because we need to
14 know about it before we can take action. So that's
15 always encouraged, yeah.

16 MS. BURGEL: And would there be inspections?
17 You know, would -- would that engender an evaluation by
18 Cal/OSHA to go in and do a special targeted assessment
19 of that industry?

20 MR. BERG: I mean, I'd have to discuss that
21 with Cal/OSHA enforcement branch.

22 MS. BURGEL: Thank you.

23 CHAIR THOMAS: All right.

24 Kate.

25 MS. CRAWFORD: Hi, Eric. We heard multiple

1 times a couple of requests on lead -- one for an
2 extended public comment period, so, No. 1; and you're
3 going to take that back to the Chief, but we also heard three
4 or four times for an additional advisory committee. What is
5 the possibility? It's a direct question. So what is -- what
6 is the possibility of an additional advisory committee on
7 lead regulations?

8 CHAIR THOMAS: Christina, you had a reply.

9 MS. SHUPE: Yeah. I'd like to step in for a
10 moment, Eric, if you don't mind, because we're now in
11 formal rulemaking. Advisory committees are conducted in
12 pre-rulemaking. There's no time allowed for in the APA
13 for advisory committees. And so what we risk, if the
14 Board decides to move down that road, is losing the
15 regulation.

16 And as far as extending the public comment
17 period, I think that that's something the Board might
18 consider when we're in April and we're actually at the
19 end of the public comment period. We can discuss that
20 with your counsel. That might be an option allowed
21 under the APA. But, again, it's one of those things
22 where, if you -- if you do this, you then disallow time
23 for making amendments, which is already allowed for in
24 the APA.

25 CHAIR THOMAS: Thank you.

1 Go ahead.

2 MS. CRAWFORD: So the vital piece then is
3 extending the public comment period.

4 MS. SHUPE: So the APA allows for a 45-day
5 public comment period. If there -- and we do that
6 because we want public comment. We are giving them a
7 final package. We're saying, "Please give us your
8 feedback. If you have recommendations for changes, the
9 Division will then consider them." And the Division
10 needs time to respond to those comments and also
11 implement changes.

12 So some of our recent rulemakings have had two
13 and even three changes to the regulations. But we also
14 see that every time that that happens, it puts a
15 regulation at higher risk for going away. And that's
16 what we're experiencing with first-aid.

17 And I understand the frustration of the Board
18 and the public with first-aid not moving forward. But
19 one of the contributing factors was that we had multiple
20 15-day notices. And when we got to the end of the time
21 where the Board had to absolutely vote whether or not to
22 approve, that package was not ready. And so I
23 understand the public's desire for additional public
24 comment, but this is why the APA allows that 45-day
25 period.

1 MS. CRAWFORD: Thank you.

2 CHAIR THOMAS: Any other --

3 MS. LASZCZ-DAVIS: (Unintelligible.)

4 CHAIR THOMAS: No?

5 MS. LASZCZ-DAVIS: Would you let me talk

6 again?

7 CHAIR THOMAS: Yeah.

8 MS. LASZCZ-DAVIS: Okay. Good.

9 CHAIR THOMAS: Well, wait. Let's think about
10 that --

11 MS. LASZCZ-DAVIS: No. Don't think too hard.

12 CHAIR THOMAS: No. Go ahead. Go ahead.

13 MS. LASZCZ-DAVIS: Yeah. Don't think too
14 hard.

15 You know, I know we've been talking about
16 regulations as -- we almost think of updated regulations
17 as the start of mitigating risk. And the truth is for
18 both heat illness and lead, I mean, we've got
19 regulations on the books already.

20 So, you know, if we don't get to a point where
21 we can refine them within the time prescribed, it isn't
22 like we don't have anything on the books. So, I mean,
23 it seems to me that the logical thing that might occur
24 would be -- and it goes back to this whole education
25 thing, would be for the State to begin to issue alerts

1 and guidance, you know, to the public sector and
2 workplaces, refreshing the memories as to what the
3 protocols are for both lead and heat illness. So it isn't
4 like we're without any guidelines or starting points for
5 standards.

6 And, I guess, when it comes to workplace
7 violence, I mean, that hits home for all of us, I mean,
8 our kids, our grandchildren, the schools, I mean,
9 retail stores. That's a tough one, because I think
10 everybody is on edge with that situation. You go to an
11 airport, catch a plane. It isn't like you don't have
12 that issue even on a plane these days.

13 But the truth is, it surprised me to hear that
14 there is no tracking of incidents at this point in time.
15 And that's something that the consortium of retailers
16 can establish so they have their own repository of
17 tracking incidents. I mean, we've heard some pretty
18 harrowing stories this morning and there are probably
19 thousands of others like it, but is there anybody that's
20 tracking all that so that the data does become aggregated --
21 and -- and visible for all of us? I mean, I don't know. I
22 guess I'd have to ask the retailers then.

23 MR. BERG: I mean, the United States Bureau of
24 Labor Statistics does keep statistics on workplace
25 violence incidents and they -- they publish those. I

1 don't know how comprehensive it is or includes all
2 industries, because there's probably exceptions that
3 don't have to report. But they do keep statistics.

4 I know -- I think it was NIOSH and Bureau of
5 Labor Statistics -- sorry -- did a recent report. I
6 think it's 2022, where they covered some of the stats on
7 that, and they showed that there is, I think,
8 1.2 million workplace violence incidents per year in the
9 period they looked at in their studies. So we know it's
10 very common. It's happening every day.

11 MS. LASZCZ-DAVIS: Is there an opportunity to
12 share some of that information?

13 MR. BERG: We post it on our website -- the
14 link.

15 MS. LASZCZ-DAVIS: Okay.

16 MR. BERG: And the advisory committee page for
17 workplace violence, we have that link to that study.

18 MS. LASZCZ-DAVIS: Okay. And the other
19 comment that workplace violence -- and, please, don't
20 misunderstand this. Yes, absolutely we need a standard
21 regulation, but, I mean, it's not an issue that's just
22 health and safety, although it's one pillar of the whole
23 issue that you got the legal system in play, you've got
24 communities that need to come together.

25 So we -- we can enact and should enact a

1 regulation, you know, which is a great starting point.
2 But the truth is there are a lot of other, you know,
3 influencers within the world that we live in that can
4 help put a cap on some of that, I think.

5 And do we have -- do we require -- do we
6 request that companion elements also work with Cal/OSHA,
7 like the legal system and communities and all? I'm not
8 sure how that all works. But standards alone won't fix
9 the problem, although they're an important pillar for
10 the whole issue.

11 So, I mean, I don't know if you want to
12 comment or not, but I'm listening to all -- we're not
13 going to fix the whole issue; that I can guarantee you.
14 So, I mean, what can we do to influence the other
15 elements that will help bridge the fix?

16 MR. BERG: Well, the training is critical so
17 people know what to do when something happens. Like, in
18 my case, I had no idea what to do when violence broke
19 out in the store I worked at. I was very fearful and I
20 didn't know what to do. I was kind of in shock. So
21 training would have helped.

22 And then, also, implementing preventive
23 measures. There's several preventive measures that can
24 be instituted. And then tracking them so people know what's
25 happening where they work, you know. They know a

1 history. So there's several things that could be done.

2 In many jurisdictions you have workplace
3 violence regulations. We did some research, I think.
4 Most of them are in Canada, but we did see other
5 workplace violence prevention laws or regulations.

6 MS. LASZCZ-DAVIS: But we don't -- we don't
7 take a stance with city councils or police forces or
8 anybody like that in terms of what we have done and what
9 is it that they can do in coming to the table to bridge
10 that. I mean, we don't do those kind of --

11 MR. BERG: We could definitely improve
12 communication with, you know, law enforcement agencies.
13 I mean, we have worked with them in the past. So.

14 MS. LASZCZ-DAVIS: So more of a hand-in-glove
15 working relationship sounds like it might be a start, or
16 a bridge, at least one bridge.

17 MR. BERG: Yes, for sure.

18 MS. LASZCZ-DAVIS: Okay. Thank you, Eric.

19 MR. BERG: Okay.

20 CHAIR THOMAS: Any other questions?

21 MS. STOCK: Dave, yeah. I have one more
22 comment for Eric.

23 And I just wanted to follow up, I think, on
24 what Barbara was saying about, you know, what can be
25 done in the interim. So, you know, we know that it's

1 going to be a year before we have an indoor heat
2 regulation. We do have an outdoor heat, but not an
3 indoor one, and we know what's going to be -- we don't
4 know how long until we have the workplace violence.

5 So, Eric, could you comment about what -- you
6 know, if -- if people -- so people who are facing those
7 hazards now, they have the right to file a complaint
8 with Cal/OSHA if their employer is not taking action,
9 even in the absence of a specific regulation. So what would
10 happen in those instances? I assume Cal/OSHA would go in and
11 investigate and potentially cite under the injury and illness
12 prevention program. Is that the case? If you could just
13 comment on that.

14 MR. BERG: Yeah, that would be a case. We get
15 a formal complaint about workplace violence. We would
16 cite under the injury and illness prevention program, as
17 you say, or possibly issue a special order. It depends
18 on the circumstances.

19 We do have, like, a model IIPP on our website
20 to address workplace violence, and we do have a web
21 page how it's addressed, in addition to the IIPP.
22 So we do have information on that. And, yeah, that's
23 how it would be addressed.

24 MS. STOCK: And people could actually be
25 cited, you know, these are recognized workplace

1 hazards. And if there's hazards that are found during
2 an inspection they -- an employer could be cited for not
3 taking steps to address either indoor heat or workplace
4 violence; is that correct?

5 MR. BERG: Yeah, that's correct.

6 MS. STOCK: And then just a last comment.

7 I know that Cal/OSHA often does these
8 special-emphasis programs like, you know, heat sweeps in
9 the summer and outdoor heat, et cetera. And I'm
10 wondering if there's opportunities to identify as a
11 special emphasis enforcement program to look at
12 workplace violence and indoor heat in this period of
13 time, particularly where we don't have the support of
14 specific regulations.

15 MR. BERG: Yeah. it's something that we should
16 bring up with enforcement -- I'll bring up with the
17 enforcement branch. I believe they're already working
18 on indoor heat, but I'd have to check with them. And
19 also about workplace violence.

20 MS. STOCK: And I think workplace violence
21 rises to the level of something that requires that
22 urgency as well --

23 MR. BERG: Yes.

24 MS. STOCK: -- in general industry.

25 Thank you.

1 CHAIR THOMAS: Thank you, Lara.

2 Any other questions? All right, we'll
3 continue with legislative --

4 MS. SHUPE: We're going to lose our -- our
5 interpreters.

6 CHAIR THOMAS: Oh.

7 MS. SHUPE: We need a 15-minute break.

8 CHAIR THOMAS: Okay. Well, I'm -- let's
9 finish this part so we can get this done.

10 Autumn, can you just give us a brief --

11 MS. GONZALEZ: Sure. Very briefly, I just
12 wanted to draw your attention to SB 553. It's a
13 workplace-violence proposed bill in the Senate. So the
14 Legislature does have their eye on that issue. Good to
15 know.

16 And SB 686, domestic workers, this would
17 amend, narrow the exception that currently exists
18 in the program for domestic employees, domestic
19 workers. And that's it.

20 CHAIR THOMAS: Thank you.

21 Any questions for Autumn? All right, Christina?

22 MS. SHUPE: Thank you, Chair Thomas.

23 We've talked a bit about vacancies and how the
24 workload is outstripping our resources. This is well
25 known. So hiring continues to be a top priority for us.

1 We've conducted interviews to fill our vacant
2 Attorney III positions, legal analyst, and permanent
3 senior safety engineers. I anticipate that we'll be
4 able to introduce you to at least two new staff members
5 next month. We have interviews for two limited-term SSE
6 positions scheduled over the next two weeks and we'll
7 be scheduling interviews for a legal secretary vacancy
8 shortly.

9 We have a number of vacancies to fill, though,
10 so we also expect postings for another Attorney III
11 position as well as a newly vacant permanent SSE
12 position.

13 Since our last meeting, your staff has
14 conducted an advisory meeting. It was our third for
15 walking working surfaces. We also have an advisory
16 committee meeting for construction personnel, who I
17 scheduled for March 22nd, and a third meeting of the
18 2020 firefighter PPE advisory committee will be held on
19 April 4th. Excuse me.

20 The Board has received a petition for
21 emergency rulemaking from the Western Occupational
22 Environmental Medical Association. They're seeking
23 emergency regulations to control the hazards of airborne
24 silica dust in shops that fabricate engineered stone,
25 also known as artificial stone. This petition will be

1 posted on the Board's website probably next week as
2 Petition 597 and will be distributed for evaluation by
3 both the Board and Division staff.

4 And, finally, this is a bit delayed, but I'm
5 pleased to welcome and reintroduce Amalia Neidhardt. As
6 you know, she is the Board's new principal safety
7 engineer. In addition to her experience as a senior
8 safety engineer with the Board, Ms. Neidhardt brings
9 over 20 years of experience with Cal/OSHA. Please join me
10 in welcoming her to the Board's management team.

11 Thank you. Are there any questions?

12 CHAIR THOMAS: Any questions for Christina?

13 All right. Seeing that there are none, we're
14 going to go to a 15-minute recess, after which we'll
15 start the panel discussion. So it is 12:04. We'll be back.
16 at 12:20 and so we'll see you then.

17 MS. STOCK: Dave, can I just ask a procedural
18 question?

19 When we get back to the panel, should we be
20 signing in with the new Zoom link, Christina?

21 CHAIR THOMAS: I don't know.

22 MS. SHUPE: Yes. So audience participants can
23 stay where they are, but, my Board Members, you'll need
24 to go ahead and step off of WebEx and rejoin through
25 Zoom.

1 MS. NEIDHARDT: (Inaudible).

2 MS. SHUPE: If you have any questions, the
3 Board Members can reach out to me directly.

4 CHAIR THOMAS: So can you switch the thing
5 back so we can see Dave Harrison, because I think he
6 thinks we can hear him.

7 MR. HARRISON: No. Laura asked the same
8 question I was going to.

9 CHAIR THOMAS: Okay. All right. So everybody
10 got it? All right.

11 Fifteen minutes. We'll see you then.

12 (Break)

13 CHAIR THOMAS: Thank you, John.

14 We are back in session and we are going to
15 proceed with our panel discussion. And this panel
16 discussion will be on automated agricultural equipment.
17 It will be moderated by Ms. Shupe. There will be a
18 30-minute comment period following the panel discussion
19 where the public can address questions about items
20 discussed during this portion of the meeting.

21 So, Ms. Shupe, would you like to introduce?

22 MS. SHUPE: Thank you, Chair Thomas.

23 So according to estimates compiled by the
24 United Nations Food and Agriculture Organization, by 2050,
25 we will need to produce 60 percent more food to feed a

1 world population of 10 billion. Here in California
2 where we produce over a third of the country's
3 vegetables and 75 percent of United States fruits and
4 nuts, this is an especially pressing issue.

5 Similar worldwide food-production gains were
6 accomplished from 1960 to 2000, but collateral damage
7 from farming methods included land degradation and
8 deforestation, over-extraction of groundwater, emission
9 of greenhouse gases, loss of biodiversity, and nitrate
10 pollution of water bodies. We need technological innovations
11 to move forward sustainably, but they can't come at the
12 expense of the health of those who are among the most
13 vulnerable to food scarcity, our agricultural workers.

14 The discussion today will focus on
15 technological advances in autonomous farming methods and
16 how innovative technologies can be introduced to
17 California farms without extracting a cost in worker
18 safety standards.

19 John, if you would pull up the slides, please?
20 Just one moment. I pulled together, very quickly,
21 some examples of the different equipment that we'll
22 be talking about today, because they range
23 significantly from very small golf cart-sized sprayers
24 and autonomous vehicles to equipment that is
25 significantly larger. They include equipment that has

1 space for a driver, an emergency shutoff, but also in
2 Australia they're developing large machines that are not
3 designed to be operated by any human driver at all.

4 MR. ROENSCH: Maya, please bring this
5 up on Zoom?

6 MS. SHUPE: Since it looks like we don't have
7 those slides, we'll go ahead and move forward without
8 them.

9 So, as I was saying, autonomous agricultural
10 equipment comes in many flavors from the sensor retrofit
11 kits for existing equipment, such as those developed by
12 Bear Flag Robotics to tractors slightly larger than a
13 golf cart.

14 And joining us today we have representatives
15 from labor, management, manufacturing, academia, and the
16 Division of Occupational Safety and Health. So I'd like
17 to introduce our panel members.

18 First, representing the Association of
19 Equipment Manufacturers, Igino Cafiero, who is the
20 founder and CEO of Bear Flag Robotics, which retrofits
21 existing tractors with patented AI technology. Bear
22 Flag was acquired by John Deere in 2021.

23 Jassy Grewal is here representing labor
24 interests. She is the legislative director with UFCW,
25 Western States Council. UFCW represents over 180,000

1 California workers, predominantly in the food sector,
2 including thousands who are farmworkers.

3 Michael Miiller is the director
4 of government relations for the California Association
5 of Winegrape Growers and represents agricultural
6 employers. Mr. Miller has more than 35 years of public
7 policy experience, including holding leadership staff
8 positions in the California Senate and Assembly.

9 Walter Mizuno joins us from Lyles College of
10 Engineering at California State University Fresno. He
11 has over 40 years of teaching and research experience,
12 including work in agriculture and mechanized systems.
13 He currently serves as the director of the Process
14 Control and Automation Academy performing research
15 funded by the USDA, CSU ARI, and the California
16 Department of Water Resources.

17 And then Mr. Yancy Yap, senior safety engineer
18 for the Division of Occupational Safety and Health, is a
19 lead engineer working on the Monarch Temporary
20 Experimental Variance. He has dedicated 23 years to
21 worker safety at Cal/OSHA, where he has conducted 240
22 serious-injury investigations.

23 So thank you to all of our panel members.

24 Now, this is a discussion, not testimony, so
25 I encourage everyone, Board Members and panel members

1 included, to engage in that manner. I'm going to go ahead
2 and kick off the discussion with a question that I'm going to
3 lead off towards our manufacturing representative.

4 So, Mr. Cafiero, if you don't mind beginning,
5 one of the benefits that manufacturers tout for
6 automated machinery is connectivity and the ability to
7 push software updates from the Cloud. How can worker
8 safety be ensured from both passive interruption, i.e.
9 lost signal, and active interference, hackers?

10 MR. CAFIERO: Yeah. Can you hear me?

11 CHAIR THOMAS: Perfect.

12 MR. CAFIERO: Thanks. What a privilege to be
13 here. Thank you.

14 I do represent the industry. My company,
15 Bear Flag, was acquired by John Deere. So I'll speak --
16 I'll speak to what I know, but hopefully it more broadly
17 applies to the industry as well.

18 So the question has really two points.
19 There's a concern around security from bad actors and
20 hackers, and there's a question, really, about
21 connectivity loss, you know, how the machine, you
22 know, actually operates.

23 So the first one, you know, cyber security is
24 intrinsically related to autonomy. And we know this,
25 you know, as a market leader. Deere, unfortunately,

1 being a market leader, we're the target of cyber attacks
2 every day. You can imagine the consequence of a bad guy
3 getting into a combine or a sprayer during a crucial
4 part of the season. The results could be catastrophic
5 and, unfortunately, a lot of folks want to do that.
6 So this idea of keeping our machines secure is
7 nothing new, and we have a couple paradigms to do that.
8 So, you know, the question asks, you know, what can we
9 actually do?

10 We use things like authentication to make sure
11 the right people are logged into the machines. We use
12 access control to make sure, you know, that I as a user
13 of the piece of equipment can't get access to the whole
14 fleet, for example. We use augmentation so that, if a
15 bad actor were able to get into the machine, they can't
16 have access to other parts of the machine.

17 And then in addition we have, you know, a very
18 sophisticated security operations center that looks for
19 anomalies across the fleet. If we detect that, you
20 know, something bad has happened. If, you know, if a
21 bad guy has gotten into the system, we can see -- we can
22 see that flare-up and we can react quickly. It's a
23 muscle we built and it's something we continue to
24 do.

25 I should mention, too, you know, this is an

1 ongoing thing and we recognize that we're fallible here
2 and we don't -- we don't know what we don't know. And
3 so John Deere and other companies host events where we
4 bring in what we call "white-hat hackers." These are --
5 these are folks that like hacking, but want to do it for
6 good, not for evil.

7 And we -- you know, we lay all the equipment
8 out in front of them and we lay tractors and computers
9 and network equipment out and we say, you know, "Do your
10 worst, you know, what can you find here?"

11 And then we use that information to make our
12 systems stronger going forward. So we have a
13 closed-loop approach to security. And it's something -- you
14 know, it's something we deal with every day. And I'm happy
15 to talk about that, too.

16 I think -- I think it's very appropriate that
17 we come together as an industry to create regulations
18 around minimum requirements for security and best
19 practices as well, and we fully support that and look
20 forward to an advisory committee to discuss just that.

21 In regards to signal loss -- and I heard -- I
22 heard some very concerned comments about this and, you
23 know, I can understand the concern around signal loss,
24 too.

25 I certainly don't speak for all -- I think it

1 was all 40 implementations of autonomous equipment out
2 there. I -- I'm very familiar with a small number, but
3 I will share, like -- listen, like, of -- of the stacks
4 that I know, the technology stacks I know, how to deal
5 with a signal loss is implementation specific. And
6 there's a wide breadth of varieties of ways to handle a
7 loss of connectivity.

8 One of the best practices and certainly in the
9 autonomous stacks I've worked on is you have all the
10 critical computers and sensors local to that machine.
11 That means these machines don't require connectivity to
12 be safe.

13 And then, furthermore, they can self-diagnosis,
14 so they know when they have signal loss. There's, you
15 know, pretty basic concepts in systems engineering and
16 robotics called, like, "heartbeats" or the "watchdog
17 timers." And basically what these do is they know --
18 they know when a sensor or another party isn't -- isn't
19 connected, and so they can -- they can react
20 appropriately. Some -- some systems, when they lose
21 connectivity, will shut down immediately and go to a
22 known safe state. Others that, you know, have the
23 appropriate safety mechanism in place can continue going and
24 be resilient to signal loss. But these are
25 implementation-specific.

1 And, you know, we and I and the industry would
2 strongly urge the Board to consider an advisory
3 committee to characterize, you know, these behaviors,
4 because there is a wide variety of implementations. And
5 we look forward to working with labor, with academia,
6 with government, with regulators to come up with the
7 safest, most sensible regulations possible in this
8 industry.

9 Thank you.

10 MS. SHUPE: Does anyone else from the panel
11 have any follow-up questions?

12 MR. MIILLER: Can I just add a comment?

13 MS. SHUPE: Yeah.

14 MR. MIILLER: Sure.

15 MS. SHUPE: It's discussion.

16 MR. MIILLER: I'm Michael Miiler, California
17 Association of Winegrape Growers -- and, also, Wine
18 Institute asked me to speak on their behalf today as
19 well. They couldn't attend today.

20 On this issue, one, it's a really good
21 question; I mean, it's a critical question. Our
22 growers in using these -- this equipment --

23 UNIDENTIFIED SPEAKER: (Unintelligible) can't
24 hear you.

25 MS. LASZCZ-DAVIS: (Unintelligible).

1 MR. MIILLER: Dave can't hear me? Is it on?

2 MS. SHUPE: It's on. You're just not close
3 enough.

4 MR. MIILLER: Okay. Now can you hear me,
5 Dave? Sorry about that.

6 So in using the equipment, our growers want to
7 make sure the equipment works and is safe, for a bunch
8 of different reasons. One, we want to make sure that our
9 workers are safe. We want to make sure that there's
10 protections against hacking.

11 Above and beyond that, you have to remember
12 our growers are taking a chance putting this equipment
13 into their, you know, vineyard or their orchard or their
14 field, because what they're doing is they're saying,
15 "Here's this machine; we're going to put it into the
16 field and hope it doesn't run into the vines, hope it
17 doesn't run into a tree, hope it doesn't, you know,
18 cause damage on the property and to our -- to our
19 employees."

20 So, in looking at making that purchase and
21 that investment in that equipment, they're going to want
22 to see all the evidence that this machine is safe and
23 there are protections against hacking and failure.

24 And one thing we know when we were down in

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25 Tulare where we had a machine that lost its

115

1 connectivity, the fail-safe worked. It stopped. It
2 didn't operate. So we saw at firsthand what happens
3 when it doesn't have that connectivity. It just stops
4 working.

5 So we share that concern.

6 MS. SHUPE: Yeah, absolutely. Please don't --
7 just jump in.

8 CHAIR THOMAS: Don't hesitate. Just jump
9 in --

10 MS. SHUPE: (Unintelligible).

11 CHAIR THOMAS: -- because everybody else will.

12 MS. GREWAL: Jassy Grewal with UFCW.

13 I would say we have two main concerns as it
14 relates to the connectivity of automated machinery.

15 The first is the lack of reliable and secure
16 signal, particularly in rural areas, and operators
17 restarting tractors for lost signals when it's actually
18 a safety issue. So I think our concern is that if equipment
19 shuts down, is that because of signals or is that
20 because of some safety issue that's actually happening
21 with a worker or some other issue with that tractor?
22 Worker safety cannot be insured for passive or active
23 interference. That is the point.

24 How often do cell phones still lose signals in
25 urban areas decades after the technology was introduced?

1 This problem is made worse in rural areas where there
2 isn't access to the internet. The state is investing
3 more resources to address the digital divide that rural
4 communities face, but we are a ways off from fixing those
5 inequities.

6 It seems like we have the cart before the
7 horse here. A worker's death or serious injury should
8 not be the impetus to figure out how to fix these
9 problems. We need to make sure they're fixed on the
10 front end, not on the back end.

11 These heavy-duty automated tractors are
12 reliant upon a secure and stable signal. Otherwise, all
13 these so-called safety features will not be effective in
14 protecting the very workers they are intended to
15 protect. I know you've mentioned that it is not always
16 reliant upon that, but we don't know about the numerous
17 other devices that are out there and how they are set up
18 with their safety signals.

19 On our second main concern, we are extremely
20 worried that remote operators, off site or elsewhere, in a
21 field will get used to restarting tractors that stop due
22 to lost signals. This creates a real danger that
23 tractors may be restarted when they have stopped because
24 a worker has collapsed or fallen off the tractor's path
25 or, if there's a system glitch and if the tractor is

1 restarted, could pose a significant concern to workers
2 that are near or on the tractor.

3 This is made even worse when you have remote
4 operators watching more than one tractor. This means a
5 remote operator is not able to immediately identify why
6 the tractor was stopped before they remotely try to
7 restart the tractor, believing it was for lost signal
8 when, in fact, it was a much more serious health and
9 safety issue.

10 On the issue of active interference from
11 potential hackers, active interference can give a remote
12 operator inaccurate information on the tractor, leading
13 to a disastrous consequence. The more connected these
14 tractors are, the more hackable they are. Any manufacturer
15 that says this isn't a concern is not being truthful.
16 Hackers have repeatedly accessed the most secure corporations
17 and most secure government defense agencies on earth. They
18 would have no problem with autonomous companies.

19 And hacking doesn't just happen with active
20 software interferences. There are other ways to throw off
21 autonomous tractor safety features within the external
22 environment. For example, including something on the ag site
23 that would cause the tractor's programming to derail the
24 tractor's programmed pathway. So you saw this when
25 Tesla was piloting their autonomous fleet. They

1 actually looked at -- not on the internal side, but the
2 external, what can you do on that tractor's path or
3 that vehicle's path to actually derail some of these
4 very heavy-duty machinery with open blades? So Tesla didn't
5 do that. They looked at their car vehicles, but I'm
6 relating it back to tractors that are heavy-duty with
7 open blades that are sharp that could hurt workers.

8 MS. SHUPE: Well -- and then I think we are
9 all, you know, looking for a lot of corollaries between
10 what's going on with Tesla and other autonomous road
11 vehicles and looking to apply them to agriculture.

12 MR. YAP: I actually have a question for --
13 directed to Igino.

14 So, with the proprietary technology from
15 various manufacturers of autonomous equipment and the
16 stringent access to the databases for these equipment,
17 how do manufacturers ensure transparency to regulators
18 to verify safety issues with the equipment?

19 Suppose there are near-miss -- you know,
20 near-accidents and events that occur that -- that, you
21 know, that occur in the field that we would not have
22 known about otherwise?

23 MR. CAFIERO: Yeah, absolutely.

24 And thanks -- thanks for the comments. It's
25 exceedingly helpful for me and for industry to hear the

1 concerns of folks that aren't closely looking at this
2 technology. And we have real opportunity here to share
3 our approach. And my hope that, you know, sharing,
4 sharing the real engineering work going on here, the
5 hard engineering work going on here, would do quite a
6 bit to subside some of the concerns folks had around
7 safety.

8 I'll mention quickly, I think it's -- there's
9 a potential that we're conflating, you know, signal loss
10 with a loss of safety. You know, any system needs to be
11 resilient to signal loss. I don't mean to speak for all
12 implementations, because I don't. But I can speak for
13 the implementations I know that a system that isn't
14 resilient to signal loss would potentially be a very
15 unsafe system, and we're certainly not advocating for
16 that.

17 What -- what we would advocate for is an
18 advisory committee that comes together to discuss the
19 details of those, because there's some really important
20 details, and I think -- my hope is that parties here
21 would be interested in learning more and we could -- we
22 could explain how we design these systems robustly and
23 resiliently. I'm exactly for those situations.

24 Yancy, thanks. It's good to see you again.
25 Thanks -- thanks for the prompt there, too.

1 You know, there's -- the data landscape's
2 complicated, right? And understandably, different
3 manufacturers have sensitivities around IP and sort of
4 what they collect, you know. And I get that.

5 I do think there's an opportunity here to be
6 transparent with that data -- share relevant data that
7 helps regulators, helps the public, helps users, helps
8 owners gain confidence in that machine. And where
9 that's appropriate, we're certainly excited to do that.

10 And once again -- you'll hear me. I'll sound
11 like a broken record here. The call is for an advisory
12 committee to be set up to do exactly that. Let's --
13 let's determine what's useful and helpful, and then let's
14 share that data and move forward so that we can -- we
15 can create a safe -- you know, safe industry here.

16 MS. SHUPE: At the risk of derailing some of
17 your discussion comments, I do want to say, you know,
18 this panel discussion exists outside of an advisory
19 committee. An advisory committee is something that
20 happens once rulemaking has commenced, and it's really
21 conducted by staff. This is an opportunity to talk to
22 the Board Members, and that's where we want to focus our
23 comments.

24 CHAIR THOMAS: I think Dave Harrison wanted to
25 make a comment. Dave?

1 MR. HARRISON: Yeah. I just wanted to go back
2 to one of the things that -- and, "Igino," am I
3 pronouncing that right?

4 MR. CAFIERO: Yeah, close enough. "Igino."

5 MR. HARRISON: "Igino," okay.

6 You talked about using white-hat hackers, and
7 we've been engaged with this industry and manufacturers
8 for several years now -- "we" being not just the Board,
9 but in other capacities. And these white-hat hackers
10 are finding, you know, leaks in the system that were
11 able to make the system stronger.

12 We've heard some comments in the past that --
13 from other manufacturers, our systems are a
14 hundred-percent bulletproof, and -- and based on the
15 comment you made, obviously, we know that's not true.
16 What would you see as an acceptable level, let's say,
17 if a hundred percent were bulletproof and zero
18 percent means the thing's going to run off on its
19 own and kill everyone in sight? At what percent of
20 security would you think would be acceptable to engage
21 this equipment in the ag industry?

22 MR. CAFIERO: Yeah. Thanks, Dave.

23 I -- I would agree with the statement that
24 connected -- you know, connected devices. It's -- I
25 haven't seen a system that doesn't have some

1 vulnerability, and this goes for everything from simple
2 things like your thermostat to fighter jets to, you
3 know, any other mundane -- trains, planes, automobiles,
4 right? There's innovative people out there on both
5 sides and it's, you know, kind of an arms race, and that
6 doesn't apply just in ag or just to tractors, you know;
7 cases vary, right?

8 And Dave, even there, like, within a system.
9 there's parts of the system that would be, you know,
10 more vulnerable to hackers and some of them will be less
11 vulnerable.

12 I'll take, like, the commercial airline
13 example. If you -- if you get on a Jet Blue, you can
14 watch TV and you can plug in a USB device, and there's
15 a potential to hack that, you know, TV screen right in
16 front of you. Does that mean that the autopilot's
17 vulnerable on that plane? Probably not.

18 And so it's a nuanced question. I'm not
19 qualified nor have been thoughtful enough to sort of
20 give a number to what's an acceptable vulnerability rate
21 for systems. I would -- you know, I would expect to
22 compare it to other paradigms and look for some examples
23 in industry that have been set, perhaps, in aerospace or
24 in defense or in automobiles as well. But I don't have
25 those numbers offhand.

1 MR. HARRISON: Yeah, and I appreciate the
2 honest response there.

3 I just say my concern is around -- you kind of
4 compared it to an airplane where there's a pilot in the
5 seat and we're talking about a tractor with no pilot,
6 and that's where the concern is.

7 So thank you.

8 CHAIR THOMAS: Yeah. And I -- I just want to
9 make a comment, because I think our concern -- mine and
10 Dave's and people in our position is that, you know,
11 automated sounds great, and I know there's a cost-benefit
12 analysis for having them. They sound pretty expensive
13 to me than having someone behind the seat. But, I mean,
14 we all know it's going that way.

15 And I think one of the things -- and I don't know
16 that anybody has the safety records of, this type
17 of machinery being used with live humans anywhere for
18 any amount of time, where we have kind of an idea of
19 what actually happens out there where the work's being
20 done and where people are vulnerable and things can
21 happen.

22 If there is, I heard a lot of numbers earlier
23 in the meeting. I didn't hear about any accidents or
24 any fatalities, which, I think we all know, if it goes
25 on long enough and there's enough, there's enough study

1 of it, there is going to be some injuries, possibly
2 fatalities, and what the reasons are that those
3 particular issues happen. I don't -- I don't know that
4 we have those facts at hand.

5 And I realize that we take a lot of things for
6 granted nowadays, but we all know we have really smart
7 cars now and really smart phones, but I'm not taking my
8 hands off the wheel, even if I got the guardrails on
9 everything else, because I don't trust it.

10 So what -- I mean, what's your answer to the
11 fact that at some point you will probably be liable for
12 something, injury to a human or death to a human and,
13 you know, what -- and I think Dave was asking what's an
14 acceptable cost.

15 I think we all know that things are going to
16 happen out there, whether we intend for them to or not.
17 Whether it's being run by a person or automated, doesn't
18 matter; something's going to happen. So I'm just kind
19 of asking you how long -- I mean, because I haven't seen
20 enough numbers to really show me that there's a big
21 advantage to it. So.

22 MR. CAFIERO: Thank you, Chair Thomas. I love
23 this conversation. This is where I spent close to a
24 decade of my life is having, you know, this
25 conversation. And thanks for the opportunity to have

1 it.

2 I'm a California native. I grew up in
3 Palo Alto a long time before anybody knew where
4 Palo Alto was, which dates me a little bit. Somewhere
5 at City Hall, I can't remember where I saw it,
6 there's a picture of a tree, and it's the site of the
7 first car crash in Palo Alto and it was over a century
8 ago. And the little plaque was pretty funny. It was
9 tongue in cheek and it said -- you know, folks stood
10 around and said, "This would never happen to a horse. A
11 horse would never run into the tree. These cars are
12 dangerous, and what are we doing here?" And you look
13 forward, and obviously this is a humorous example, but, you
14 know, technology marches forward, and cars are foundational
15 to our society right now.

16 You can imagine trying to go farming without a
17 tractor today. You know how dangerous that would be,
18 you know, if we were trying to till, you know, all the
19 acres in California with picks and shovels. The amount
20 of heat stroke and exhaustion and toil on the human body
21 would be unthinkable.

22 And so when we think about the benefits of
23 autonomy, it's really an evolution of those same things.
24 You know, we talk about getting folks further away from
25 chemicals. We're talking about getting them help

1 moving, you know, and high-value crops moving. Moving
2 the fruit -- you know, lettuce, grapes, table grapes, et
3 cetera. Heavy crates long distances using robots to
4 help them do that.

5 We're talking about removing them from heat
6 and exhaustion. This came up in different contexts as I
7 was pleased to hear that others in California are
8 discussing, you know, climate change-related heat
9 injuries as well, because it's super relevant.

10 I've -- I spent a considerable amount of time
11 in the last decade sitting in tractors in
12 over-a-hundred-degree heat in the Central Valley. It's
13 -- it's important, and it's good work, and it's hard, and
14 you need breaks. It's -- it's extremely strenuous.

15 And then we talk about heat-fatigue-related
16 deaths -- or, sorry, injuries operating machinery,
17 distracted-related injuries operating machinery, you
18 know, low-light conditions, all these things, and
19 autonomy endeavors to reduce those incidents as much as
20 possible, and we're certainly on that arch.

21 I -- yeah, this is the carrot, you know.
22 There's certainly -- you know, with what's possible, we
23 also need to be prudent and the industry is looking for
24 regulations to be established to make sure that we can
25 be prudent in our advances as well.

1 MS. SHUPE: So that actually leads me into one
2 of our next questions.

3 MS. STOCK: Christina, I actually had a
4 question, if I could.

5 MS. SHUPE: Yeah, please.

6 MS. STOCK: Sorry about that.

7 Yeah. It's kind of following up a little bit,
8 you know, on a comment that Dave Thomas made.

9 I know we heard this morning about -- somebody
10 was testifying about the hundreds that were in use with
11 no accidents, and I want to just reiterate that the
12 questions that I had in my mind when I was hearing about
13 that is, like, what were the conditions on the ground?
14 Were there workers in the field? And I think that's
15 really what we're looking at, is trying to get evidence
16 about what happens in a place where there are no
17 labor-intensive agriculture like we have in California,
18 and varied terrain, et cetera.

19 And -- you know, of course, I appreciate --
20 again, I'm sorry, but I don't remember your name, the
21 person who just spoke, your concern about those issues
22 around climate change and all of the benefits of that
23 autonomous equipment. And I agree with you, you know.
24 There's great promise in that and exciting to look
25 forward to that.

1 I think the issue is whether many of those
2 benefits can be achieved, you know, without having to
3 sacrifice an operator in place to be sure that they're
4 safe.

5 But I had a question that I wanted to ask the
6 representative from the Division, if I could. And it
7 was specifically about the experimental variance. So I
8 know that the last time this came up, when we denied a
9 petition. We granted an experiment -- excuse me -- an
10 experimental variance, but there was some discussion and
11 concerns about the variance and we wanted to -- before
12 we approved a petition for a regulation, because we
13 wanted to wait for the results of that variance, that
14 experimental variance.

15 And at the time I remember questions being
16 raised about what kinds of fields that variance -- that
17 the tractors were being used in, whether workers were
18 given the opportunity to speak about their experiences,
19 particularly with the fear of retaliation. So I think
20 there was a specific request that we be sure that we
21 would be able to have that occur in a place where
22 workers could speak up about their -- their -- their
23 experiences and conditions and concerns about it.

24 So I wanted to ask if -- if we could hear a
25 little bit about how that variance -- how is that going?

1 Because my understanding is that it's not done yet, that
2 it's in one of its early phases, so -- and I know we
3 were -- we had said before we wanted to wait until the
4 completion of that until we considered sort of new
5 regulations.

6 So could you give us an update on -- on what
7 you're learning and whether you're learning the things
8 we were hoping you would learn?

9 MR. YAP: Yeah. Christina, I know one of the
10 questions was related to this. I don't know if we want
11 to visit it now or later.

12 MS. SHUPE: I think we can just wrap it right
13 in.

14 So one of the questions provided to the
15 panelists that leads directly into your question, Laura,
16 was, you know, as part of the oversight of the TEV,
17 they've been collecting performance data. And we want to
18 know, you know, what does that performance data show for
19 human-collision avoidance at the two agricultural sites
20 where the Monarch Tractor is used.

21 MR. YAP: So I want to answer Laura's question
22 first, and her question was related to what have we
23 done since the last decision was made by the Board
24 Members related to involving labor in the experimental
25 variance.

1 So when the experimental variance was drafted,
2 it's almost like a contract between Monarch Tractor and
3 the Division. And those -- those conditions that we set
4 and worked together in -- in agreeing to remain in place
5 and since they didn't involve labor, we can't make
6 adjustments to our experimental variance in that
7 fashion.

8 As far as --

9 MS. STOCK: Excuse me one second. If I could
10 just ask a follow-up. I know you're right that we
11 talked about labor, but I was actually maybe going a
12 little bit deeper than that.

13 If you could report on whether you had an
14 opportunity to speak to workers in the field, even if it
15 was not, you know, with labor. So if you could comment,
16 if there's any information you have related to that,
17 that would be helpful. Sorry. Please continue.

18 MR. YAP: Well, the interaction we had related
19 to experimental variance was with Monarch Tractor. When
20 we went to the field, when I conducted field surveys,
21 the workers were absent from the field. There were no
22 workers to interview to find out what their experience
23 was with interacting with the -- with the tractor.

24 UNIDENTIFIED SPEAKER: Yancy --

25 MS. STOCK: Sorry. And are you saying that

1 when you conducted those, there were no workers in the
2 fields, so you were not able to observe how it worked
3 when there were workers in the field? Am I hearing that
4 correctly?

5 MR. YAP: That's correct.

6 Let me continue with the -- so to give Monarch
7 credit, when they used the tractor and when they ran it
8 in an autonomous mode, they ran it in fields where
9 normally workers were not working in. And when I --
10 when I spoke with the growers, if they were using
11 traditional tractors, there normally wouldn't be any
12 workers in the field. So, essentially, the tractors are
13 being used for weeding, for pesticide application. They
14 weren't being used when -- when -- when workers were working
15 near the tractors, working and walking about around the
16 tractors.

17 So in grape harvest, I've, you know, had a
18 chance to do grape-harvest survey. And using
19 traditional tractors, an operator would tow a trailer
20 carrying the harvested grapes and a crew of about 10 to
21 15 workers would pick grapes and load them onto this
22 trailer. And with the experimental variance, the
23 tractor wasn't being used in this fashion.

24 MS. STOCK: And can I just ask, just as a
25 follow-up, so given that --

1 MS. SHUPE: Laura, if you don't --

2 MS. STOCK: -- the --

3 MS. SHUPE: I don't know if you can see, but
4 Mr. Mizuno actually has a point to add that might be
5 helpful.

6 MS. STOCK: Oh. I'm sorry. No, I can't see
7 that. Yes. I'll wait 'til he continues. Sorry about
8 that.

9 MR. MIZUNO: I'm sorry to interrupt, but it's
10 a question in terms of the test conditions.

11 When Monarch was operating their tractors, the
12 type of work they were doing, did it approximate what it
13 would do in real life? In other words, you're saying
14 that when you're harvesting grapes and you've got people
15 in the field and you're in an autonomous vehicle, people
16 would be around that tractor? In the case that you're
17 explaining, if I understand you right, you've got the
18 tractor doing work where there ordinarily would not be
19 anybody in there. So this is the type of test condition
20 you've got, right?

21 MR. YAP: That's correct.

22 MR. MIZUNO: So I guess my point is, when
23 you're looking at application later on, the grower would
24 most likely put that tractor into service for its
25 intended purpose, right, unless it's designed to work

1 in a -- alongside other people in the field, but instead
2 it's designed to really work autonomously by itself.

3 That's the way it would be employed?

4 MR. YAP: That's correct.

5 MR. MIZUNO: Just a clarification. Thank you.

6 MR. MIILLER: Could I add on to that just
7 quickly, because this is --

8 CHAIR THOMAS: Just jump in, man.

9 MR. MIILLER: Okay. So this -- this is a
10 really important distinction.

11 When we're looking at this equipment we're
12 talking about, this technology, I think we're
13 assuming that California law is what's happening in the
14 rest of the world, and it's just not. This equipment
15 is already in use in Europe, New Zealand, South America,
16 Australia, Oregon, Washington, the Midwest. Everywhere
17 that grows a crop has this equipment available and it's
18 in use already. We're the only place that I'm aware of
19 where you have to have a person physically on board this
20 tractor. So when you're looking for data, you have to
21 recognize that we're talking about something that's just
22 out there in the real world everywhere except here.

23 So the data, it's out there. Every
24 manufacturer has -- can tell you where their parts are
25 being sold and how they're being used. For us, our issue is

1 when you look at the hierarchy of controls, right, you want
2 to make the workers safe. That's the top priority. How do
3 you do that? Elimination of the hazard is your top goal.
4 That's part of how you do it. If you're looking at a
5 tractor, there is just an inherent risk in operating a
6 tractor.

7 And what we've done, instead of, you know,
8 just eliminating the tractor from the workplace, what
9 we've said is, "Well, we have to make sure someone's on
10 board the tractor; we've got to put safeguards,
11 anti-roll features, those kinds of things." And they
12 do work and they make the tractor safer, but there are
13 still accidents. I know of a grower who lost his son in
14 a tractor accident, and I was there when he got notified,
15 you know, that his son had been killed in a tractor
16 rollover.

17 I guarantee that employer -- that person
18 wanted his son and his people to be safe. But there are
19 just some inherent risk. And if you really want to
20 address that risk, take the driver off the tractor,
21 that's how you do it, or you make the tractor safer by
22 making it autonomous, in other words.

23 When you -- when you look at all that, all
24 that together and make that your top goal, then you can
25 have a conversation about, "Okay, if we're going to

1 eliminate the driver from the tractor, how do we put
2 parameters around making it really as safe as possible
3 against, you know, potential risks with other people
4 there?"

5 To Yancy's point and to the professor's point,
6 we predominantly use these equipment when there's nobody
7 else there. You're spraying a pesticide through a
8 sprayer -- this is a sprayer that is being pulled right
9 now. There's nobody on board that sprayer. By taking
10 the person out of that situation, you're reducing their
11 potential exposure to the pesticide, right?

12 You're also, by using precision application of
13 the pesticide through the collection of the data,
14 through robotics, you are reducing how much pesticide is
15 being used. So it also reduces risk for the environment
16 and the worker. So all that combined, when you really
17 look at the hierarchy of controls, the existing
18 regulation is actually an impediment to safety.

19 When you look at the technology that is
20 existing today, that we're saying "No, you can't use it,"
21 you're actually creating a needless risk, and that's why
22 we would like to see it changed.

23 And I think, to the point of the gentleman
24 from Deere, there is a conversation to be had about how
25 do we, you know, amend the regulation to fix it to make

1 it -- you know, so that people feel comfortable with it
2 and can understand the total technology and the
3 parameters around it. That's all.

4 MS. GREWAL: I didn't know if we could ask
5 questions. I'm happy to jump in. I just wanted to --

6 CHAIR THOMAS: Just -- just jump right in.

7 MS. GREWAL: Yes. I just didn't know what the
8 process was with the Board Members.

9 MS. SHUPE: (Unintelligible).

10 MS. GREWAL: We often hear, when it comes to autonomous,
11 whether it's heavy-duty fleets, autonomous cars, "Well,
12 everyone else is doing it first so why are we behind?
13 It's deployed elsewhere, but California's lagging."

14 Well, California has a specific process in
15 place for a reason. It is to protect workers. And when
16 I hear Yancy say that, "Oh, we're only piloting this in
17 an area where there's no workers around that is
18 extremely concerning to labor, to UFCW, because we
19 have workers in lettuce plants-- in lettuce fields."

20 And in lettuce, how harvesting happens is you
21 have workers around the tractor. They are pulling
22 lettuce heads out of the ground, putting it on the
23 tractor. They might be on the tractor; they might be
24 near the tractor in very close proximity. And so if you
25 don't have a human safety operator on that tractor, the risk

1 for something to go wrong, to hurt one of the workers who is
2 in front or behind the tractor, is very significant.

3 And I think what is concerning to us is that
4 we know that if autonomous tractors are approved, that
5 will be something that is used in our workplace setting
6 without understanding the human risk and the human toll
7 that it could have, since this variance does not have
8 that worker component. And I think that is extremely
9 concerning for us of making sure we're not putting the
10 cart in front of the horse here, that we are truly
11 protecting these workers.

12 And when we talk about the workers, we have to
13 remember these are workers who are often sometimes not
14 documented. They are not eligible for safety net
15 programs. They do not get healthcare. So if they are
16 hurt, that is something those families cannot afford to
17 have, because often there are families working together
18 in the field and they're relying upon each of these --
19 each other's incomes.

20 So you have one worker get hurt in an
21 autonomous tractor accident, that is someone's whole
22 livelihood that is gone. And especially for someone who
23 is vulnerable, like an undocumented worker, that is not
24 something that they can take on. So we have to be
25 really cognizant about the workers we are affecting

1 here, and when we're talking about the impacts of
2 those workers, what it means in these test pilots to
3 actually understand where the technology fails so we can
4 protect workers in the future.

5 We are not opposed to technology. Technology
6 does have a value in making sure our members work and
7 safer. But it is not a replacement for their work. You
8 have someone who is there that can immediately respond
9 to a situation, not someone who is virtually away, not
10 on the field, trying to tackle eight different tractors
11 at once and figure out, "Oh, no, this one might hit one
12 of the workers in the field; oh, now I have to stop it."

13 But what is that delay between that human
14 stopping it and then the stop actually happening with
15 the tractor? So I just wanted to touch on that.

16 And then I did have a question for Yancy, but
17 I can ask that after, I know, some other commenters.

18 MS. SHUPE: Yeah. I'd like to jump in here,
19 because I think that Yancy -- and correct me if I'm
20 wrong, but you're in just the first stage of the
21 temporary experimental variance, but you do have plans
22 for human tests, right?

23 MR. YAP: So, as a clarification, when we
24 drafted the conditions for this experimental variance,
25 we told Monarch that we wanted workers in the field

1 doing normal duties. And it wasn't until I performed
2 field surveys that I found out that workers were in
3 separate fields when the tractors were being run. So
4 -- but our intention was to have workers performing normal
5 work in the field, and I wanted to have human avoidance,
6 collision avoidance, with those workers in the
7 field.

8 Those were the data that we were looking for
9 and we wanted to see how it performed. But we didn't
10 get that, so that's -- I mean, that's where we are.
11 That's how it is.

12 MS. KENNEDY: So it seems to me that there are
13 sort of different images in people's heads about what
14 goes on during farming. And, you know, doing something
15 like weeding or spraying pesticides and implementing
16 that is very different than harvesting, where you do
17 have a lot of people in a field. Some operations, there
18 are no workers in the field, and some operations there
19 are a great number of workers in the field, and I think
20 it's really confusing and not helpful to the
21 conversation to mix the two together.

22 And so maybe one way, as we move forward in
23 this development of this technology, which is likely
24 going to keep moving forward, is to start in places
25 where there aren't a lot of workers in the field.

1 And my guess is that's already what's being done. I
2 don't know. I'm in California. I don't see a lot of
3 it. But I do think that's important to remember
4 as we move forward in the conversation.

5 MS. SHUPE: John, have you resolved the
6 technical issue with the slides? I think that they
7 might add some -- some value here.

8 And I see that we have two hands up from our
9 two remote participants as well, but if we can pull those
10 slides up, it will give everybody a visual of really the
11 breadth of what we're talking about, because Monarch is just
12 one manufacturer in this space.

13 Okay, so you'll see here a John Deere
14 autonomous tractor. And I think it's important to note
15 that we're not just talking about the tractor itself,
16 right; we're talking about everything that can be
17 attached to that tractor as well.

18 Go ahead and advance to the next slide. Other
19 direction.

20 This is the Monarch sprayer that the Division
21 has been working with. And you'll see it in an
22 application where there are no workers around it. This
23 addresses some of the secondary hazards, right?
24 Exposure to pesticides.

25 Next slide.

1 But here you'll see autonomous vehicles in
2 strawberry harvesting. Now, this picture only shows one
3 worker in the field, but you can very easily imagine a
4 number of workers next to these machines, which are
5 described as lightweight, but are obviously
6 significantly larger.

7 Next slide.

8 And this, again, we talked a little bit about
9 the things that can be attached to these tractors. Now,
10 this is a planter that -- I think, it runs 120 feet.

11 MR. CAFIERO: Don't quote me on
12 specifics. That sounds about right.

13 MS. SHUPE: Yeah.

14 MR. CAFIERO: Product people would
15 (unintelligible).

16 MS. SHUPE: Significantly larger than a golf
17 cart.

18 And then go ahead and show us the video.

19 Now, we mentioned earlier some of the
20 autonomous equipment being used in Australia and other
21 countries.

22 MR. ROENSCH: Doesn't seem to want to
23 show the video.

24 MS. SHUPE: That's unfortunate, because what
25 you would have seen is a rather large vehicle. Looks

1 much more like an armored tank, but with no space --

2 CHAIR THOMAS: Here we go.

3 MS. SHUPE: Here we go. Lots of potential
4 hazards. Nobody on board. I don't know that these even
5 have a kill switch on board, but it's also being
6 operated in an area where there are no workers at all.

7 And I think it's important as we advance
8 through this -- and, Nola, you touched on this --is to talk
9 about we don't necessarily go straight to this, you
10 know, what's the intermediate step?

11 While you were at the -- and I'm going to go
12 back to my questions. While you were at the World Ag
13 Expo, and I think most of the folks here were able to
14 attend that, you may have seen some of the
15 labor-replacing autonomous machines, such as the
16 airborne drone sprayers. And we heard testimony earlier
17 from Adam Fine from Bluewhite about the number of
18 rollover fatalities that happen every year, and so those are
19 examples of where autonomous machines are being used to
20 increase safety, but in applications where the work site is
21 expected to be secured. And we don't have any regulations on
22 what a secure work site is.

23 So my question to the panel is which
24 labor-enhancing autonomous equipment might offer safety
25 improvement for workers over existing safety standards,

1 you know? And can we start there. And I see hands up for
2 both Dave and Laura, so I invite either of you to jump in.

3 MR. HARRISON: So I just want to make a couple
4 of observations.

5 We heard earlier today from AEM about data
6 that was collected, you know, and from Michael Miiller
7 that these machines are being used all over the world.
8 And we've asked for -- for near-miss statistics.

9 I would follow up with asking for hacking
10 statistics and the data -- not specifically, obviously
11 -- but data around what the white-hat hackers are able
12 to find to make these systems stronger. How many
13 attacks or how many threats were detected on a regular
14 basis with this stuff?

15 I mean, we've talked about collecting data to
16 support the request of the petitioner or anyone else
17 wanting to bring this technology into California, and I
18 think it's extremely incomplete data.

19 And just follow up again that there's a lack
20 of labor involvement, right? We're relying on -- and
21 I've said it before -- a largely immigrant or
22 family-owned workforce that are the least likely to
23 stand up and say, "Hey, there was a near-miss and
24 somebody should be contacted." One of my concerns. I wanted
25 to just drop that into the conversation.

1 Thank you.

2 CHAIR THOMAS: Laura, you had --

3 MS. STOCK: Yeah, I just want to jump in very
4 briefly just -- just to kind of -- you know, what we're
5 hearing, back to what our decision was before.

6 We felt that we weren't ready, but we were
7 going to get this information from this experimental
8 variance. So it seems clearly what I've heard is that
9 we're not getting the information that we would need on
10 that experimental variant. So unless something else
11 occurred where Cal/OSHA was able to do their
12 investigation in real-life situations where people are
13 in the field, we're able to talk to workers about what
14 their experience was, I don't feel like we're going to
15 get the information that we already said we needed
16 before moving forward on rulemaking. So I just want to
17 highlight that.

18 And that, going forward, you know, if this is
19 going to be something that comes before us, I hope we
20 can explicitly seek that kind of information. You know,
21 what would it look like where workers are there? How
22 can we get labor involvement? How can we be sure that
23 there are workers who can speak freely and confidently
24 that they -- you know, anonymously or however
25 necessary, to be able to speak up? Because, as Dave and

1 Jassy both said, this is a population that has a lot of
2 reasons to be fearful about speaking up. So it feels like
3 we're missing some very, very important information.

4 MR. CAFIERO: Thank you, both, for those
5 points.

6 My observation, being here briefly and, you
7 know, in this dialogue, is I'd venture to say we're
8 actually quite aligned with labor. And the areas that
9 we're not, as Professor Kennedy pointed out, might be
10 misunderstandings.

11 There's -- I think there's some assumptions
12 about the technology, how we're implementing it, that
13 made us not be complete. And I look forward to the
14 chance to explain some of those, you know, to address
15 those concerns directly.

16 Specifics do matter. I don't know if this is
17 the forum to get into, you know, systems engineering
18 conversation, but applications that we operate in
19 autonomously -- how many people are around the tractor?
20 What are those people doing? Are they -- you know, what
21 clothes are they wearing? These things matter and we
22 need to talk about them to create a safe environment.

23 Additionally, too, I don't pretend to know too
24 much about the process here with the Board. The
25 variance that happened with one specific company --

1 there's a plethora of companies that also have
2 information are eager to join the conversation along
3 with other parties, along with labor, along with
4 regulators.

5 And I don't know what the appropriate next
6 step is, but we're eager to discuss and share what we
7 can to illuminate the situation.

8 CHAIR THOMAS: Go ahead.

9 MS. KENNEDY: I was just going to say it seems
10 like we're not going to be able to get California-based
11 data, since we don't allow these vehicles right now.
12 But it would be great if we could hear more about data
13 from other places to address our concerns and the things
14 we're asking about.

15 CHAIR THOMAS: Yeah. I would say, if there is
16 all -- if this is happening in all these other different
17 states and areas and around the world, that there would
18 be data that would show what happens. I mean, there
19 should be.

20 I don't know how every state keeps their
21 records as far as fatalities and accidents, you know, on
22 farms and stuff like that. I don't know. But you would
23 think that there would be some statistics that would be
24 available to look at and kind of make an assessment of
25 whether this is something that would be attainable, I

1 guess. But from what I'm hearing right now is most of
2 the things that are being done -- and I don't know about
3 the other states either. It may just be done the same
4 way it's done here is there's not really people around.

5 And I understand why they would do it this
6 way, because you know, these machines don't get hungry.
7 They don't need breaks, you know, they don't need any
8 of that stuff and they can just keep going. And I get
9 that. But if there's no people around, that's a whole
10 different thing than mixing them in with people and I
11 don't know that there's any data on that.

12 MR. CAFIERO: Chair Thomas, I'd like to come
13 back to the other point too about, you know, folks in
14 other states doing other things.

15 I completely agree with the gentleman on the
16 right side of our screen here. You know, just because
17 other states are doing it doesn't mean we should do it.
18 My seven-year-old son knows that -- knows that argument
19 too. And we're completely aligned there.

20 I think the important thing to call out here
21 is the benefits of autonomy. And if you look at, "Hey,
22 what we're proposing is you're going to get out of that
23 field; you're going to get into an air-conditioned
24 room; you're not going to have the excess heat,
25 vibrations, exposure to chemicals, all these things that

1 exist in real farming today."

2 And, furthermore -- and this is a point that
3 Adam Fine made, which is incredibly on point -- is we're
4 opening up the labor pool to folks who might not have
5 considered agriculture previously. Folks who don't
6 think that their, you know, bodies could handle the
7 hardship of a day in the field, which is quite extreme.
8 And we've opened up the labor pool.

9 So on one side, we're making our workers more
10 productive, helping fill this labor gap, but we're also
11 attracting more folks to the industry.

12 And then, lastly, something close to my heart
13 as an employer in the state is upscaling labor as well,
14 saying, "Hey, listen, like, you're going to come here;
15 you're going to learn the skills that you need to have
16 upwards mobility; you're going to learn computer
17 skills; you're going to learn technical skills; you're
18 going to learn how to interact with complex technical
19 systems, which should further you on your career." And
20 we've seen that at Bear Flag and I'm very proud of that
21 specific thing as well.

22 MS. LASZCZ-DAVIS: I'd like to say just a
23 couple of things, if I might.

24 You know, as Nola spoke, I thought, you know,
25 I align with her observations entirely. I think we're

1 talking apples and oranges in terms of the view of what
2 autonomous equipment and its circumstances are. And I
3 think you need to separate them, because, you know, as we
4 move forward, it may be more appropriate to deal with
5 certain circumstances versus others.

6 So, I mean, this isn't going to be a carte
7 blanche put these vehicles out there and hope to God
8 nobody's out there. I mean, that isn't the way this is
9 going to work, for one.

10 The variance -- and I have to -- I'm not sure
11 that we heard your information the same way. What I
12 heard you say was that, you know, you went ahead and,
13 you know, you observed the operation, but that there
14 were no employees in the field.

15 Was that the intent of the operation? Or did
16 they purposely move the employees to other fields?

17 MR. YAP: That was not the intent of the
18 experimental variance. We wanted people to be in the
19 field.

20 MS. LASZCZ-DAVIS: Okay. Okay. And I wanted
21 a clarification on that, because I wasn't sure about
22 that, because there would be autonomous operations where
23 you wouldn't need to have people in the field. Okay.

24 MR. YAP: Correct.

25 MS. LASZCZ-DAVIS: That's good. And the

1 benchmarking data comment, I've heard it several
2 different times; you've talked about it globally;
3 you've talked about it nationally; pull the data
4 together and share it with us, quite frankly.

5 And I hear a lot of focus on injuries and
6 fatalities. What I found over the years of working in
7 industry -- incident data is absolutely powerful. And,
8 you know, that's not being collected. That's a
9 strategic error. So if you had the incident data --
10 those are the near-misses -- that's real important.

11 MR. CAFIERO: What's the best format to have
12 this discussion? Where can we engage with, you know,
13 labor and government and -- like, what's the best way to
14 do that?

15 MS. STOCK: I'm sorry. Can I just ask one
16 thing to Chris's comment where you're asking for
17 incident data, which I completely agree.

18 I just want to again highlight where we both
19 need to find that data and we have to think about where
20 we're getting it from. I feel like if we don't have a
21 mechanism to be able to talk to people, workers who are
22 in the fields, who may have observed near-misses that
23 actually didn't maybe make their way up to something
24 that the technology captured, I just want to say if
25 we're going to be looking for external data to answer

1 this question. I really feel like it's important to
2 figure out a way to be able to capture data from workers
3 in the field. So -- because otherwise I think that what
4 we're going to get in terms of incident data is going to
5 be, you know, tremendously under-reported, potentially.

6 Sorry. Go ahead.

7 MS. LASZCZ-DAVIS: But going back to your
8 question, I mean, to me the most logical path forward
9 would be an advisory committee process of some sort,
10 where this could be further discussed and refined.
11 That's just my personal bias.

12 CHAIR THOMAS: Yeah. And I don't -- I don't
13 really think there's any disagreement with that,
14 because, you know, we're all going through this. We're
15 all learning about it.

16 And, you know, to your point about the car
17 smashing into the tree, you know -- and we all know,
18 car manufacturers, they run test after test after test
19 on everything they do. I mean, that's how we have
20 seatbelts now that we have to put on. And they're
21 getting better and better because you can't avoid them
22 anymore, you know. You can't -- you can't shift unless
23 you put your seatbelt on, but I'm bad. I'm bad about
24 that, but I've gotten a lot better, because I had to.

25 But -- but it's -- it's interesting. And I

1 think we all -- labor has concerns. I know you guys
2 have concerns, because I know nobody here really -- they
3 don't want to hurt anybody. They don't want to kill
4 anybody. And, you know, for the most part we don't want
5 people to lose jobs because of automation, although we
6 know that that is inevitable at some point, but there
7 may be other and better jobs that come out of that.

8 But I still think that what you said, Chris,
9 is the data -- I mean, that -- I mean, at least it's
10 something we can look at and say, "Okay, you know, we
11 can -- we can look at this and we can kind of evaluate
12 how we want to set up something."

13 And -- but I think that-- I think it's really
14 important, and I've heard a lot of stories, especially
15 with operating engineers, where, you know -- where it
16 used to take seven or eight people to run a pit. They
17 got one guy with a computer doing all this stuff and
18 probably, you know, changes their whole financial setup
19 of the company. And, you know, I mean, if people are
20 going to try and make as much money as they can without
21 having any liabilities or anything else, that -- that is
22 going to happen. But I think that we're not really
23 opposed to the idea. I think what -- there's some other
24 things that we're opposed to, but we don't want to get
25 people hurt and we don't want -- we don't want to lose

1 jobs. So there's got to be a fine line in there
2 somewhere where we can do what needs to be done with
3 those vehicles so that we can learn more how to -- how
4 to make them work right, work with people, and --

5 Yeah, that's a long way of saying, "Yeah, we
6 should have an advisory committee." That would have been
7 probably the easiest thing to say, real quick, right?

8 MS. STOCK: Can I just make a comment on the
9 advisory committee?

10 And just back to, Christina, you were telling
11 us earlier -- I just want to kind of flag what you said,
12 or be sure that I'm understanding it. I think everybody
13 agrees that more conversation is valuable, where labor
14 and manufacturers and employers and workers can get
15 together and talk about it and hash out these issues.
16 So I think, you know, creating a forum where that could
17 happen is only going to be beneficial.

18 I think advisory committee has a very specific
19 meaning in our system and that only -- if I understood
20 what Christina said, that only occurs when a petition
21 has come before it and -- and the rulemaking has begun.
22 So I don't think we're there yet. And, in fact, we
23 denied the most recent petition. So I -- I
24 just want to say that the advisory committee, as it's
25 organized by the Standards Board -- Christina, correct

1 me if I'm wrong -- is -- is not necessarily the forum
2 that is going to be available at the moment. That does
3 not preclude another, you know, privately organized or
4 publicly organized forum where these people can continue
5 to come together and hash out these issues.

6 But, Christina, can you just clarify if I'm
7 understanding what you said correctly?

8 MS. SHUPE: Yeah. So I think that conflating
9 the petition process with the advisory committee process
10 is a misunderstanding. We can actually begin what we
11 call "pre-rulemaking," which is the investigation
12 period, and that is where advisory committees take
13 place and advisory committees are the forum where we
14 explore these issues. We can convene that either at
15 Board direction, staff initiated; it can also be done
16 because we have federal regulations we need to come into
17 compliance with, or it can be legislatively mandated.

18 So I would say it does not require this Board
19 to grant a specific petition in order to start moving
20 forward in that process. I think that the advisory
21 committee process and that pre-rulemaking investigation
22 period is probably appropriate, because what that allows
23 us to do is to look at the existing environment and the
24 existing regulatory environment.

25 And that discussion should be within the

1 bounds of, "Are we still protecting worker safety? Are we
2 adopting procedures that acknowledge the innovation but
3 also maintain standards that are at least effective as
4 our current worker safety standards?"

5 And I think that Chris' point to incident
6 data should be a part of that discussion. I don't think
7 that any safety professional would suggest moving
8 forward with the rulemaking if we didn't have incident
9 data.

10 MS. GREWAL: I just wanted to make a quick
11 point on the data piece of it.

12 I think, as we look at different states who
13 might have some sort of technology that's similar to
14 this, that we are looking at data in an apples-to-apples
15 and an oranges-to-oranges comparison. Are these state
16 plans states? Are they under federal OSHA? And if there have
17 been complaints formally by workers or other advocates, were
18 they followed up with? What were some of the concerns that
19 workers had in those situations?

20 And so making sure that when we are making
21 these comparisons, they are apples to apples and oranges
22 to oranges, because without that, you will have an
23 incomplete picture around the data of the use and
24 deployment of this technology in other states.

1 MS. SHUPE: And -- and that's a critical point
2 to make, because California's agriculture is
3 significantly different than the agriculture that you'll
4 run into in Kansas or what we saw in that video for
5 Australia, and we need to be cognizant of that.

6 I would also add that the pre-rulemaking
7 period isn't just limited to advisory committees. A lot
8 of times our engineers engage with the Division what
9 they've done in the experimental space, but they also do
10 their own field surveys and they also go out and do
11 their own investigations above and beyond just an
12 advisory committee.

13 MS. STOCK: So, Christina, that comment -- and
14 thank you for that clarification.

15 So since we've been hearing about some of the
16 limitations of the experimental variance with Monarch
17 and the way that it was described -- so there's an
18 opportunity that there could be further investigations
19 with -- in this pre-rulemaking to try to capture the
20 kinds of things that we're saying are not being captured
21 there?

22 MS. SHUPE: That's correct.

23 MS. STOCK: Thank you.

24 CHAIR THOMAS: Do you have another question to
25 go to? Because I think we talked that one out.

1 MS. SHUPE: Yeah. Okay, so this one I'm going to
2 direct toward Mr. Miiller. So, Mr. Miiller --

3 MR. MIILLER: I'm in trouble.

4 MS. SHUPE: But you've been prepped for it --

5 MR. MIILLER: Okay.

6 MS. SHUPE: -- so I expect a good answer.

7 So employers have argued in favor of the
8 adoption of driverless equipment on the basis that labor
9 is unavailable at wages sustainable in the current
10 market economy. Some manufacturers claim to be able to
11 minimize workforce expenses by having -- and, Jassy, you
12 touched on this -- a single operator responsible for as
13 many as eight autonomous machines in a field at a time.

14 Now, I think we've established that that's not
15 where we're ready to go, but in those driverless
16 scenarios, you know, from the employer perspective, what
17 are reasonable measures to keep workers safe in this
18 scenario?

19 MR. MIILLER: So thanks for the question.
20 It's a variety of things. One is, when we're
21 talking about equipment that is being used when there's
22 nobody else in the orchard or the vineyard, that is one
23 obvious way to protect people; when you're looking at
24 that kind of application, make sure that no one is near
25 the machine. And when we're looking at things like past

1 application or those kinds of things, you have a huge
2 worker benefit in doing that.

3 There's new research coming out of
4 New Zealand where they can actually take a robot
5 through a vineyard, for example. They can -- using
6 their optic information, they can -- you can get the
7 sensors that are detecting exactly where everything is
8 located for pest issues, right? Like, for a vineyard,
9 if you're looking for red blotch, right, or leaf
10 mold, you want to know where that is; you want to know
11 exactly where it is. So the grower gets a map at the
12 end of the day of the vineyard saying, "Here's where you
13 have problems." The next day they go in with a robotic
14 sprayer that sprays only those locations. So, again, you
15 have worker protections there as well. And, again, nobody
16 would be in the vineyard there.

17 Going back to the premise for the question,
18 about the workforce in general, remember that the labor
19 workforce isn't just a California problem. It is a
20 global problem. People just don't like doing ag work
21 anymore. It is hard work, and people just don't want to
22 do it. They're aging out. The average ag worker in
23 California is over 50 years old and there's not new
24 people coming in behind them to replace them.

25 I talked to a grower in New Zealand -- and,

1 remember, California has a cost of living that is
2 30 percent higher than New Zealand. That grower in
3 New Zealand is paying \$46 per hour in U.S. dollars and
4 still can't find enough workers. So this is a global
5 problem and it's not an issue of, you know, a lack of
6 high-paying jobs.

7 And I mean that respectfully, Dave Harrison,
8 because I've heard you say that before. But I just
9 respectfully disagree. It's not an issue of not having
10 good-paying jobs, because when you're paying somebody
11 \$46 an hour and you still can't find them, people don't
12 want the work. They want to do other things. They want
13 something that's less taxing on their body, right?

14 And that's why I'd actually like to talk to
15 the professor a little bit and get some feedback from
16 you, because for agriculture we work closely with
17 academia, UC Davis, Fresno State, Cal Poly, and
18 looking at a technology growth in agriculture. And a
19 big part of that is training our workforce. What are --
20 what does the future of agriculture look like?

21 And I know that your college is very involved
22 in that, and when you're looking at technology like
23 this, making sure that the workers are educated and
24 trained is a big part of it. And to an earlier point,
25 it is a transferable skill, so you're bringing more

1 people into the job because they're learning something
2 new that isn't just going to be applied in an orchard or
3 a vineyard. It's going to be something they can take to
4 other industries.

5 So I think you piggyback on that, if you don't
6 mind.

7 MR. MIZUNO: You're exactly right. We do a
8 lot of training, primarily through our ancillary
9 organizations. If you follow Fresno State at all, we
10 have a center for irrigation technology. And as the
11 technology in irrigation has changed, we bring all the
12 irrigators in and train them to be more efficient, to
13 be more efficient with the use of water. So it is a
14 training process.

15 And I think you're going to see the same thing
16 here, in that the operators have to be retrained, you
17 know. They're no longer driving a tractor in a
18 traditional sense, but they're -- I hate to say, but
19 it's more like joy stick, you know, a joy stick or a
20 video game jockey.

21 And the reason why I use that term is I work
22 with the Air Force as well on their unmanned drones out
23 there, and some of the biggest problems that they have
24 is just the -- the quality of the people that come in
25 and want to be a pilot. They find out that their best

1 pilots tend to be the video jockeys; that's where
2 they've been playing all their lives. And so it's a
3 different set of skills.

4 And the same is going to happen here. When you
5 bring in new technology, you're going to have to retrain
6 your workforce -- simple as that. But, you know, you've
7 already made the comment that it's going to be higher-paying
8 jobs, and that's good. It's upward mobility and, you know,
9 the university's all for that.

10 CHAIR THOMAS: Dave, you had a question or a
11 comment?

12 MR. HARRISON: Yeah. I just want to follow up
13 with -- with the comments that were just made about
14 retraining your workforce. And we hear this a lot --
15 excuse me -- about retraining your workforce. And right
16 now, the way we see it, you have a tractor operator who,
17 when he's not running the tractor, he jumps off and he
18 jumps down in the ditch, he's laying pipe, he's doing
19 whatever he has to do to keep that farm working,
20 because, God knows, the farm -- a farm owner can't
21 afford to have guys sitting around on a tractor waiting
22 for someone to get other work done so that he can
23 continue running the tractor, right? We know that.

24 Now we're talking about retraining our
25 workforce to become essentially engineers. We keep

1 hearing this technology, "We're going to retrain our
2 workforce for folks that are going to be running these
3 computer systems." Now, you're going to ask that same
4 workforce that; when they're not running that computer
5 system, to jump down in the ditch and start laying pipe.

6 So think about the -- it's almost, to me, like
7 we might be painting ourselves into a corner with the
8 labor shortage issue that we keep hearing about, that
9 you're going to take a part of your workforce and
10 completely push them into the technology corner and
11 eliminate them from the rest of your farm operation.

12 And so I just wanted to add those comments and
13 make everyone mindful that, you know, retraining our
14 workforce isn't the end-all/be-all answer to this issue.

15 MR. MIILLER: To be clear, I think you
16 actually kind of made my point for me here a little bit,
17 because when you -- when you look at the workforce
18 available and you look at the demand for workers, right,
19 we don't have enough people to do the job, right?

20 So what you're talking about is creating
21 something that's going to bring more people in, right?
22 So if you have now created a technology that's available
23 for people to -- in these new jobs -- the person who was
24 doing that tractor can choose whether they want to do
25 that new job over there or they can do other work in

1 agriculture, where we can't find enough people already.

2 So it's not -- no one's being replaced, per se,
3 because we just don't have enough people already. So
4 you're looking at trying to find ways of bringing new
5 people and giving them a new marketable skill and going
6 in that direction.

7 MR. CAFIERO: Excuse me, just a point of
8 information; I was told this panel was about safety,
9 and shall we stick to safety, or -- I feel passionately
10 about creating --

11 CHAIR THOMAS: I was going to say, this can go
12 far about as far as you want it to go.

13 MR. CAFIERO: I started two companies in the
14 state. I feel passionate about being an employer in
15 this state. I feel passionate about jobs. I care
16 deeply about the people on our team. And I'm happy to
17 have that conversation, but if we bring it back to
18 safety, it might make sense.

19 The questions was about what labor -- I think
20 -- the prompt I wrote down in my notes was, "What safety
21 measures are reasonable?" And when we think about this, at
22 John Deere, there's, you know, like, departments for
23 specific things. And so I think the woman that is our
24 safety -- she runs the safety team for our project, which is
25 autonomy in orchards.

1 And I want to make sure my words are
2 correct. When I think about safety, there's really two
3 categories. One is product safety, which, as a
4 technologist, I feel qualified to talk on the other's
5 operational safety. Operational safety is probably what
6 this Board is used to. These are things like mandatory
7 -- like, training for users; this is mandatory
8 maintenance schedule; this is logging and audits for
9 machines; this is emergency procedures for when
10 accidents do happen. We need those in place. This is
11 the same as you would have for a tractor or a sprayer or
12 a piece of harvest equipment or anything else. We need
13 -- we need operational procedures in place to make these
14 things work properly.

15 From a product perspective -- and this is
16 closer to my background as a technologist. When you
17 think of autonomous systems, there's -- there's three or
18 four components -- three or four categories of
19 components, you know, and we can break it down in its
20 infinity components or its four, I don't know, one of
21 the two.

22 The first category is perception sensors and,
23 you know, these -- these are things you can see on
24 YouTube, if you just, you know, Google it or whatever.

25 We have categories of passive sensors. These

1 are -- these are sensors that work like our eyeballs and
2 take energy from the world and translate that into
3 information. So this is your computer-vision cameras,
4 your thermal-image cameras. And then there's a whole --
5 and those -- those are fantastic in some situations.

6 And then there's a whole other category of
7 sensors called active sensors that actually shoot energy
8 out in the world and re -- bounces back. And these are
9 what folks are familiar with, like radars, for example.
10 And you probably have those on your car. If you have
11 any active cruise control or anything like that, you're
12 familiar with radars. And then there's lidars, which
13 are like radars on steroids. They're a gazillion
14 times more powerful and used in different situations.

15 And so we have this array of different sensors
16 we can use. And really smart teams use them
17 differently. We have active conversations inside of our
18 team about what's the best combination of sensors to
19 use. There's not broad agreement in the industry around
20 what's the best autonomous sensor system. We need -- we
21 need a regulatory board to define requirements for that
22 system that we can then build to. That's where --
23 that's where, you know, regulators come in.

24 And in addition -- and I see the professor is
25 going to correct me on some spots here -- we got to

1 compute to process that. A computer's generally on
2 board and it's generally redundant. And there's
3 standards we use in aerospace, you know, defense
4 applications, drones, to make sure of redundancy, and
5 then there's a whole category of sensors.

6 And I think this is what my peers are most
7 concerned with, is how do we diagnose the health of those
8 sensors? And it may be surprising to folks that error
9 detection is probably where we spend our most time.
10 When sensors are working perfectly, everything's great, and
11 that's the happy case. We don't design for the happy case.
12 We design for the cases where things are failing.

13 How do we know that the brakes on the tractor
14 have failed? How do we know that we've lost
15 localization? How do we know the tractor thinks it's in
16 one place, but it's actually in another? This is
17 actually where we spend 90 percent of our time, and I'm
18 excited to engage on a conversation about that as well.

19 MR. MIZUNO: Okay. Now, I'm not trying to
20 correct you. Sorry to disappoint you.

21 MR. CAFIERO: That's all right.

22 MR. MIZUNO: Again, I want to make two points.

23 I would assume that you could, more or less,
24 choose from the suite of sensors that are well suited
25 for the type of operation you're going to be doing. So

1 when you're working with people in a collaborative
2 setting, you're going to have a different set of
3 sensors. Say, you retune your lidar so it's near --
4 near sensors as opposed to looking 30 feet out.

5 The other thing is, in terms of the health of
6 a system, you're going to build redundancy in there. I
7 know you've already looked at that. So I just want to
8 make that point clear that it's not a single sensor
9 that's going to fail. It's not a single piece of
10 software that's going to fail. If something does fail,
11 there's probably going to be a redundant system in there
12 to pick up. And then the overall system management is
13 probably going to alert the operator, too, "We've got a
14 problem here," and if it's serious, it'll shut it down.
15 If it's a minor issue, at the next scheduled
16 maintenance, bring it in and we'll repair that.

17 So that's all I wanted to say.

18 MR. CAFIERO: Okay. Go ahead. Sorry.

19 MS. GREWAL: My comments will be focused as if
20 the autonomous vehicles are with workers, because we
21 represent ag sites with workers. That is a labor union.
22 So I apologize in advance, but I wanted to make it clear
23 that my comments are specific to workers on ag sites.

24 And it's just going back to the original
25 question around safety operators watching autonomous

1 tractors. We think in this scenario that the only way
2 to guarantee safety is by having a worker on every
3 tractor.

4 And that's because we know technology fails.
5 It will fail at some point. We have to build the
6 worker-safety infrastructure of the future around this
7 unavoidable fact. It is not reasonable to expect that
8 workers on the ground in a field working on or near an
9 autonomous tractor can be kept safe, especially when one
10 operator is dividing their attention between eight
11 different pieces of heavy-duty machinery.

12 We talked about fatigue earlier. Well, that
13 safety operator is also sensitive to fatigue, right?
14 And so it's not an autonomous person watching autonomous
15 tractors. What if multiple tractors at once set off
16 safety alarms? How is one operator supposed to
17 trouble-shoot multiple different safety alarms at the
18 same time? How do they know which one is a more dire
19 situation if it's just maybe detecting that, "I need to
20 stall because of a lack of connection," right? Or is it
21 someone that hit -- hit a person and so therefore we
22 need to respond? This person's supposed to do all of
23 these things remotely without being able to be on the
24 site and observing all the different facts that are
25 happening at that site.

1 I talked about, earlier, about how we represent
2 salad workers and how they're on and near the tractors.
3 I think another thing to point out there is that workers
4 at some point have to take bathroom breaks. How is an
5 autonomous tractor supposed to know, "Oh, I came off the
6 tractor because I'm on bathroom break?" What if, in the
7 course of their work, they fall off the tractor? What
8 happens then and what systems are in place to protect
9 workers in those situations?

10 The last thing I will just mention is that
11 agriculture doesn't have a great track record of
12 maintenance for all their machinery in our experience.
13 We have significant concerns with the sensors and
14 cameras that will get knocked off of alignment or fall
15 into disrepair and won't be properly maintained with an
16 eye to maximum visibility where workers could be.

17 And I think, for us, what if a sensor needs to
18 be fixed but that employer doesn't have the ability to
19 fix it because it's cost prohibitive? Do they continue
20 to move forward using a autonomous tractor that doesn't
21 have all the proper safety features up to date? What do
22 they do in that situation where they've invested a ton
23 of money into an autonomous vehicle but then aren't able
24 to make the necessary safety adjustments that are
25 intended to protect workers?

1 And then I know this is off the safety
2 conversation, but we would love to pilot a \$46-an-hour
3 farmworker job, so if you're interested, please let us
4 know. We'd love to see what they would do.

5 MR. MIILLER: I applied as well.

6 But if I could answer a couple of those things
7 real quickly, though.

8 One, relative to the maintenance of the
9 machine, right? I've heard that assertion before. You
10 have to remember that, the example that I gave, where
11 you've got the tractor going through and it's detecting
12 the diseases and it's then creating that data. That
13 only works if the sensors are operational and
14 functional. It doesn't work if they're not being
15 maintained.

16 So that assertion just goes to
17 assume that some grower's going to invest all that
18 money and then say, "Eh, I don't need that; I don't want
19 to bother taking care of it, and I'm going to get bad
20 data and I'm going to spray stuff where I don't need to
21 spray it and disease is going to take over the vineyard
22 and things are going to die." That's just not the real
23 world. That -- that assertion doesn't fit here.

24 Then I'm more with the driver; there's always
25 a human element of a mistake, right? So if you've got

1 one person sitting on a laptop operating that machine,
2 then you've got another person sitting onboard that
3 tractor operating the machine, they've got to be in
4 constant communication. You've now increased the
5 likelihood of human error by a hundred percent. You've
6 doubled the change for human error.

7 And it's better if you take that, that issue
8 off the table by letting the machine be operated as it's
9 intended. And that's with all the sensors and all the
10 protections in place, you actually have a machine that
11 is safer without the driver onboard.

12 MR. CAFIERO: I jut want to jump in. Like --
13 truly, I'm grateful for these concerns. This is -- this
14 is fantastic. I really appreciate the chance to have a
15 dialogue about this.

16 It's underscored to me that maybe -- I might
17 get in trouble with my employer. I would love to host
18 folks with these concerns and explain a little bit more
19 about how the technology works.

20 I mentioned these four different types of
21 sensors. So keep in mind traditional cameras are the
22 only ones that work like our eyes do. There's other
23 sensors as well, like rotors and lidars that work
24 without any light at all. They can detect objects
25 in zero light conditions, which is really remarkable and

1 way better than a human ever could.

2 There's thermal-images cameras that only
3 detect heat, completely independent of light, and solely
4 look for the heat signature of humans.

5 There's -- I'm reflecting on the data that we
6 have internally, and we have an incredible number of
7 pictures of humans in fields. And there's some easy
8 cases, but most of the cases, too, are the machine
9 caught a human and you need to look for five or ten
10 seconds to find the human in the image.

11 These computers are much better at detecting
12 humans in certain situations than humans are. They
13 don't get tired. They don't get bored. They don't look
14 at their phone. These are tremendous enhancements to
15 humans. We call them superhuman features. It's -- it's
16 truly remarkable. I look forward to sharing this with
17 you.

18 And I'd like to come back once again, like,
19 just to really, like, beat this point to death. The
20 concern around when sensors fail is the primary concern.
21 It's, "How do we know this machine isn't working properly?"
22 And we spend a tremendous amount of time there. This is
23 -- this is really exciting. I think we have a lot of
24 common ground here.

25 MS. SHUPE: So I want to -- I want to

1 interject right now, because I feel like we've really
2 hit our stride in this discussion and -- but we do work
3 for OSHA, and it is time for my staff to take their
4 30-minute break, so I'm going to give you ten minutes to go
5 ahead and wrap up the discussion and then we'll bring
6 the panel discussion to an end. But thank you all.

7 MS. KENNEDY: I just want to speak real
8 quickly to tag on what you said. I hope it won't get
9 you in trouble with your employer, but I think it's
10 really important for the industry to reach out to labor
11 and address their concerns directly and, you know, in a
12 very open way.

13 MR. CAFIERO: We work quite closely with
14 farmworkers, and I was told coming into the panel, "Hey,
15 like, the labor you think of is different than labor
16 you're going to talk to." But we work quite closely with
17 farmworkers every single day, and I'll share their
18 champions for what we're doing.

19 MS. STOCK: Can I just interject --

20 CHAIR THOMAS: I'm going to say -- I'm going
21 to say --

22 MS. SHUPE: Any closing thoughts?

23 CHAIR THOMAS: Oh, sorry. I'm just --

24 MS. STOCK: Well, I was --

25 CHAIR THOMAS: Well, go ahead, Laura. Go

1 ahead.

2 MS. STOCK: I was -- I was just going to say a
3 thank you, Nola, for that comment.

4 And I just want to underline that working
5 closely with farmworkers directly given, you know, the
6 risk that people are not going to be speaking freely is
7 not going to be the same as working with organizations
8 that represent those communities. And there are both
9 unions that represent farmworkers as well as really
10 important community-based organizations and worker
11 organizations that are representing farmworkers that
12 can help them be more willing to contribute to this
13 conversation, more able to -- so I just want to underline
14 that that voice needs to be heard in these conversations.
15 Thank you.

16 MR. YAP: I just wanted to add a final
17 thought. When data's gathered for -- for -- for human,
18 avoidance -- I pulled up data from 2017 through 2022 for
19 California tractor fatalities, and there were
20 14 fatalities related to agriculture, and nine of those
21 were related to being crushed or crushed between a
22 tractor and a gate, or being run over by a tractor.

23 So I just wanted to emphasize the importance
24 of data where workers are working in conjunction or near
25 tractors. They're very different than tractors that

1 operate in the next four largest agricultural states
2 like Iowa, Minnesota, where the majority of
3 agricultural is soy and wheat and grains and dry peas.
4 The agriculture in California is vastly different and we
5 need to concentrate on -- on specific regulations for
6 tractors working with -- workers with tractors in
7 proximity.

8 Thank you.

9 MS. GREWAL: And just on that, I'd stress the
10 need to do it at different times in the day. A lot of
11 the work now is happening at night, and I think that is a
12 totally different dynamic than during the day. So
13 making sure that we're testing that throughout different
14 types of light periods, too.

15 CHAIR THOMAS: Any other comments by anyone?

16 MR. MIILLER: I just want to thank the Board.

17 CHAIR THOMAS: Thank you.

18 MR. MIILLER: Very much. I think it's
19 very informative and I appreciate it. Thank you.

20 CHAIR THOMAS: And I was just going to add --
21 oh, go ahead. Go ahead.

22 MR. CAFIERO: Did I misunderstand? Is there
23 time for public comments too?

24 CHAIR THOMAS: Yeah. After --

25 MR. CAFIERO: Will we have a chance to respond

1 to those or is that just the Board?

2 CHAIR THOMAS: We usually just listen to
3 public comments, yeah.

4 So I just wanted to add, you know, our charge
5 as the Board is to keep employees as safe or safer, and
6 that's what we have to do. And doesn't really --
7 nothing else really matters. It's like, okay, are they
8 going to be safer with the automated equipment around or
9 are they not going to be? And so that's kind of --
10 that's the question. When you get to the very end of
11 it, that's the question.

12 And if we get to that point, yeah, you know,
13 those things will probably come to fruition, but that's
14 -- that's what we have to do, is discern whether it's
15 safer or not. And that's why we have all these --
16 that's why we have all the people that work for OSHA,
17 the Division, Standards Board, that's -- that's what
18 they do, and then they give us that information to
19 decide if it's -- if it's worthy or not.

20 So -- but it's -- it's definitely worthy to
21 keep employees safe and make sure that everybody who
22 goes to work gets to come home. And, you know, and me
23 and Dave have been through a few things where guys
24 didn't get to come home and it's -- it's horrible. It's
25 a terrible thing. So that's what we have to do. And I

1 know you guys all agree with it; that should be done.

2 So that's my final comment.

3 MS. KENNEDY: Is it too premature to entertain
4 a motion of any sort or not?

5 CHAIR THOMAS: I don't know.

6 MS. SHUPE: So we -- we have actually a couple of
7 comments scheduled --

8 MS. KENNEDY: Oh, okay.

9 MS. SHUPE: -- as I gino mentioned.

10 But at this time we're going to go ahead and
11 break for 30 minutes and allow our staff their breaks
12 and allow everybody else to grab something to eat.
13 I appreciate everyone. I know this is longer than
14 our standard Board meetings, so I appreciate your
15 time and attention in sticking with us. We'll be back
16 in 30 minutes at, Dave, would you say 2:30?

17 CHAIR THOMAS: Yeah.

18 MS. SHUPE: We'll be back --

19 CHAIR THOMAS: Yeah.

20 MS. SHUPE: -- at 2:30 to accept public
21 comment on the panel discussion and possibly a motion.

22 CHAIR THOMAS: And I really want to thank all
23 of our speakers here that usually aren't up here. Thank
24 you very much. It's been very -- very good, very
25 enlightening for all of us. So thank you, guys, very

1 much.

2 Okay. So we're adjourned --

3 MS. STOCK: Christina, wait, wait.

4 MR. HARRISON: (Unintelligible.)

5 CHAIR THOMAS: Sorry.

6 MS. STOCK: Yeah. Go ahead, Dave, I think --

7 CHAIR THOMAS: Oh, no. Go ahead. Go ahead,

8 Laura.

9 MS. STOCK: (Unintelligible) same question.

10 CHAIR THOMAS: Or Dave.

11 MS. STOCK: Oh, no. I think we just want to

12 know whether we should exit Zoom and go back on WebEx.

13 MS. SHUPE: Ah. So you can exit Zoom now and
14 rejoin WebEx, because when --

15 MS. STOCK: Okay.

16 MS. SHUPE: -- we come back, we'll be back in
17 public comment. Thank you.

18 CHAIR THOMAS: Isn't that always the question?

19 All right. All right. We're adjourned.

20 (Break)

21 CHAIR THOMAS: Good afternoon. We are back in
22 session.

23 And at this time, if we have any in-person
24 commenters who want to speak on the panel discussion,
25 please come up to the podium and state your name and

1 affiliation, please, for the record. Thank you.

2 MR. JERGENS: Yes, sir. I had it filled out
3 and I couldn't find it.

4 UNIDENTIFIED SPEAKER: (Unintelligible.)

5 MR. JERGENS: All right. Can I fill it out
6 when I'm done? All right.

7 Jeff Jergens, the Association of Equipment
8 Manufacturers.

9 Again, I just want to say thank you for this
10 panel and for the Board for putting this panel together.
11 I think it's a huge step forward. I just want to
12 emphasize a couple things that came up during the panel,
13 if I may.

14 You know, connectivity was mentioned. I think
15 all the manufacturers have made sure that -- stress that
16 signal is not a requirement for autonomous machinery to
17 be working safely in the field.

18 Some hypothetical concerns were brought up
19 concerning remote operators where there's real issues
20 that autonomous equipment can address now, whether it's
21 through poisonings or rollovers or some of those other
22 hazards that come along with agriculture.

23 We've -- it was also brought up -- many
24 hypothetical near-misses with autonomy. If we're going
25 to record near-misses, are we recording those with

1 operated machinery currently, as a comparison?

2 And I want to back up a little bit. I don't
3 want to sound argumentative at all. Of course, the goal
4 is for safety all around.

5 And a little bit of background from me. I was
6 an equipment operator for 20 years, so I came through
7 this and I'm where I'm at because I love equipment and I
8 love this industry. So just I've been on the ground and
9 I've been on this equipment and I understand it very
10 well. So I just want to make sure that I am -- I am
11 with these people that are a part of this industry, and
12 it's important to me.

13 And, as Nola had mentioned, if there are
14 operations with no workers, why wouldn't we put some of
15 this machinery in there to start getting that extra data
16 on it? The reason is because the regulation, as it's
17 currently written, does not allow that, right? So we
18 need to get past that point so we can start getting
19 those equipment in the field.

20 And it's important to stress that autonomous
21 equipment is not an answer for all. It's a tool in the
22 toolbox and it needs to be applied accordingly, right?
23 You want to apply it in dull situations where the -- the
24 action is very repetitive, right? Snowplowing is a
25 perfect example for -- and snow removal is a great

1 place to put autonomous machinery, you know, a sprayer
2 running through an entire orchard back and forth;
3 that's a perfect place for autonomy.

4 So just keep in mind that it's -- we're not
5 going to go -- and there's a range of automated features
6 in autonomy. It's not an all-or-none, either. There's
7 lots of different tools for different applications, so
8 let's keep that in mind.

9 But in order to get any of those tools into
10 the field, we need to address the regulation, which,
11 according to -- as Chairman Thomas said, the staff are
12 the people that he listens to, that you rely on as the
13 Board to give you instruction. And that staff has asked
14 on multiple occasions to establish an advisory
15 committee. So if that is who you rely on to give you
16 your guidance, please, please do that.

17 Christina Shupe mentioned pre-rulemaking
18 investigation, perhaps, instead of an advisory committee.
19 That is an option. But we have to do something. The
20 regulation, as stated, is 46 years old. It can not apply
21 to what we are doing today.

22 There is some -- Dave mentioned putting
23 monitors back in the ditch. They're not going to want
24 to do that. I'm sorry that you missed out on the Ag Expo,
25 Dave, but there was a manufacturer there that

1 specifically had his equipment there. And he's pulling
2 -- instead of the guys spraying, he's pulling those guys
3 directly onto his tractor. So he's -- he's -- there's a
4 perfect example of elevating workers, right? They're
5 not pulling -- he's had owners say, "Hey, I've got to get
6 tech guys to run these machines."

7 He's, like, "No, I want the guys that were
8 doing the spraying, that understand the work, getting on
9 the machines."

10 And so we're not talking about, you know,
11 bringing techs in that don't want to get dirty. We're
12 talking about guys that are getting dirty that are being
13 elevated, but still know the work and can do that work.
14 So I think that's a great compromise there.

15 It was mentioned that, you know, how is a
16 machine going to protect -- if we have operators on
17 autonomous machines and that operator falls off, what's
18 that machine going to do? I think that's a perfect
19 argument right there for not putting operators back on
20 the machines, right? Let's not put them in a situation
21 where they may fall off. That defeats the purpose of
22 having an autonomous machine.

23 It was also mentioned we need to concentrate
24 the data on these -- from these crops. All of the data
25 that I mention -- I was kind of surprised. I mentioned

1 a lot of data when I spoke earlier and I heard several
2 people say, "We don't have data." I provided you with
3 58 three-year studies of data that we have available and
4 we can give you. But equipment manufacturers are scared
5 to share the intimacies of that data because currently
6 the regulation does not allow using this equipment.

7 So the comments are I'm going to put a target
8 on my back or I need to fly below the radar so that I
9 don't get in trouble. So we need to address the --
10 you're saying, We need more -- we need people to work
11 illegally to give us this data, which isn't fair to
12 operators and manufacturers.

13 And I mentioned at the Ag Expo tour the
14 ISO 18497 standard is the standard that governs
15 autonomy. And many, many people mentioned that they
16 would like to learn more about that standard, because
17 that could really answer a lot of these questions that
18 came up today.

19 Christina mentioned that, you know, in order
20 to do that, that would have to be advertised and
21 whatever. So perhaps the advisory committee is a place
22 where people can hear that standard, understand that
23 standard that has been put -- it's a consensus standard
24 put together by international experts in order to make
25 this equipment safer.

1 And I think if staff and Board and those
2 interested could hear what's going on with that
3 standard, you know, where this regulation is
4 46 years old -- an ISO standard goes through systematic
5 review every five years, and this standard went through
6 a review almost immediately when it was done because of
7 the rapid pace of technology.

8 And then some comments were made about, you
9 know, "What is Year Zero to 100 about, you know,
10 how safe is -- if we can cut rollovers by half, if we
11 can cut deaths by half, would you think that that's a
12 good application for putting this equipment in?" Right?
13 If we can decrease deaths by what we've got now instead
14 of hypothetical maybes down the road, isn't this a good
15 way to put autonomy.

16 So, again, manufacturers want to work
17 together. Again, staff has recommended, academia has
18 recommended, an advisory committee. Growers and
19 manufacturers are requesting an advisory committee and
20 labor would like to be more heavily engaged, and an
21 advisory committee is the perfect place to do that. So
22 that is my request from the manufacturers.

23 And I thank you so much for your time.

24 CHAIR THOMAS: Thank you.

25 Any more in-person comments?

1 Good.

2 MR. POPE: Thank you again for having this
3 opportunity. I'm Evan. I'm from the company Sabanto.
4 We make retrofit kits for autonomous tractors.

5 Before I kind of dive into my --

6 MS. SHUPE: Evan, can we please have your last
7 name for the record, if you don't mind?

8 MR. POPE: Of course. Pope, P-o-p-e.

9 Before I dive in, I'd just like to say we --
10 we've offered on numerous times to OSHA our data that we
11 collected in states like Texas, Iowa, Illinois, and
12 Florida. We work with U.S. military, so we'd love to
13 have a conversation about how we approach security and
14 safety around individuals.

15 So farming is a dangerous job and autonomy
16 makes it safer. The U.S. Bureau of Labor Statistics
17 states that agriculture is one of the most dangerous
18 jobs in the United States with 26 deaths per 100,000.
19 Compare that to police officers, which is 14 deaths.
20 Most of these deaths occur in or around the tractor
21 itself.

22 Autonomy removes the need for these
23 operators to be in these dangerous situations and
24 eliminates human error. Autonomy will also continuously
25 improve as technologies improve with it. So lidar,

1 radar, sonar, Bluetooth even -- these are all things
2 that can sense people in the field and we are -- you
3 know, the tractor will then take corrective action once
4 it knows these -- we're using these technologies.

5 Today, you know, workers are actually exposed
6 to numerous chemicals that are known to the State of
7 California to cause cancer. One of the most popular
8 herbicides used today actually has the side effects that
9 include heart failure, liver failure, lung scarring,
10 coma, and seizures -- and this is if you survive the
11 initial exposure. Autonomy makes workers safer by
12 removing the need to be exposed while applying these
13 actual chemicals.

14 Improved maintenance, which was talked about
15 quite a bit today, will benefit workers. These new
16 tractors are equipped with advanced monitoring systems
17 that can detect maintenance issues in realtime. So the
18 farmer can make, you know, quick decisions to stop the
19 tractor or we will -- the autonomy systems will stop the
20 tractor before anyone has to make a decision and take
21 corrective actions to make sure these tractors are
22 operating in top condition.

23 Having a well-performing tractor also reduces,
24 you know, burning -- reduces the amount of fuel you have
25 to burn, which, you know, obviously, helps the

1 environment and release of CO2.

2 Autonomy is safe and it is needed. It's our
3 belief that, rather than reducing jobs, it could
4 actually lead to an increase of job opportunities by
5 making farms safer and more attractive to potential job
6 applicants. California is -- leads the way in
7 agriculture and technology, and we hope we'll have a
8 chance to review Section 3441, Title 8, and love to be a
9 part of that.

10 Thank you.

11 CHAIR THOMAS: Thank you.

12 So if there's -- go ahead.

13 MS. GREWAL: Jassy Grewal with UFCW.

14 I didn't feel it was appropriate to make this
15 comment on the panel, so I wanted to make it in a public
16 setting.

17 There was discussions about moving forward
18 with an advisory committee process. And UFCW would
19 express significant concerns about moving forward with a
20 formal process like the advisory committee.

21 This morning we heard from several workers
22 around the urgent need for a workplace violence standard
23 and all the important work that's in front of the
24 Cal/OSHA staff. And we think this would take away
25 significant resources from something that should be

1 prioritized, like the workplace violence standard, and
2 moving that along, since it has been in the process and
3 in the works for seven years.

4 We also think nothing stops this Board from
5 continuing to have discussions like we did in the
6 public setting today, I mean, continuing these
7 discussions throughout the year. But to jump from this
8 to an advisory committee process seems like a significant
9 jump, especially when we're missing critical data on the
10 Monarch variance. I think there are critical pieces in
11 there that are still needing to be met that we should
12 work on first before we move into something so formal
13 like an advisory committee process.

14 So I just wanted to express the concerns on
15 behalf of the UFCW. Thank you.

16 CHAIR THOMAS: Thank you.

17 Any other in-person comments?

18 MR. LITTLE: I'm Bryan Little with California
19 Farm Bureau.

20 I wanted to say -- I guess I forgot to do the
21 usual "Good afternoon, Mr. Chairman, Board Members,
22 Agency staff," all that stuff. Yes, thank you.
23 Thank all of you for all the effort you put into having
24 this conversation earlier today.

25 And it seems like you're moving in a direction

1 where at some point we're going to have an advisory
2 committee that, by the way, need not take away from
3 anything else that the agency and the Standards Board is
4 doing. It can -- a lot of other things are in line
5 ahead of it. So I don't know that that's going to delay
6 anymore some of these things that have been delayed any
7 more than they already have been.

8 I think it's important to understand a couple
9 of incidents. I'm kind of interested -- I'm kind of an
10 amateur geek about naval aviation and aviation
11 generally. And a couple of interesting things have
12 happened in the last couple of weeks, last year or
13 so -- and then, again, last couple of weeks, that I think
14 are illustrative of a lot of what we're talking about
15 here.

16 Last week, or maybe it was earlier this week,
17 the Russian air force forced down an M29 Reaper drone
18 in the Black Sea. A Reaper drone is about a \$70 million
19 -- well, maybe \$50 million aircraft, something like
20 that. And it's operated remotely by a pilot at one of
21 several facilities around the world that the U.S. Air
22 Force maintains for drone pilots.

23 We didn't -- we lost a \$70 million aircraft,
24 or however much it cost, but we didn't lose the most
25 precious and important and most difficult to replace

1 piece of that system, and that's the pilot, because the
2 pilot wasn't on the plane when the Russian air force
3 forced it down.

4 The other interesting thing that happened in
5 January of this past year was an accident on the
6 USS Carl Vinson involving a new F-35 fighter jet that
7 suffered what they refer to in the Navy as a "ramp
8 strike." Essentially, it means that it hit the back of
9 the aircraft carrier, missed the retaining wire, and
10 rolled off the front of the aircraft carrier and struck
11 several sailors in the process and wound up in the
12 ocean.

13 It managed -- nobody got seriously hurt. They
14 managed to get the pilot out. He managed to eject, so
15 he was fine -- a little bruised up, but he was okay. So
16 in the long run, we wound up doing that and saving the
17 pilot, saving all the crew, lost a \$90-million aircraft.

18 And as a taxpayer, I'm not so happy about
19 losing a \$90 million aircraft. As the father of four,
20 one of which might have decided at some point that they
21 would like to serve their country in a capacity like
22 that, I'm glad that everybody was safe when all was said
23 and done.

24 But what's interesting about that and what's
25 relevant to what we're talking about here is that the

1 Navy's guidelines for their aviators flying F-35s off
2 aircraft carriers, they've developed automatic landing
3 systems for virtually all the aircraft they operate off
4 aircraft carriers now. And they strongly encourage
5 pilots to use that automatic landing system at least
6 seven times out of the ten that they land on the
7 aircraft carrier.

8 Landing on an aircraft carrier is one of the
9 hardest things that naval aviators have to do. When the
10 weather's bad, it's even harder. In this particular
11 case, the weather was clear, the sea was smooth, and he
12 only partially implemented the automatic landing system
13 and got behind it. Had he used -- the pilot used the
14 automatic landing system in the way that it was intended
15 to be used, he probably would have safely landed that
16 aircraft on the aircraft carrier.

17 And so, mercifully, we did lose a \$90 million
18 airplane, but we did save the pilot. But had he
19 followed the guidance that -- the safety guidance that
20 the Navy spends millions and millions of dollars and
21 countless man-hours developing, we probably wouldn't
22 have lost the aircraft and didn't put the pilot at risk.

23 So there are uses, important uses, for
24 autonomous and semi-autonomous technologies and
25 equipment of various kinds to the extent that we can

1 remove a tractor driver from the equation entirely.
2 Just to name one thing, we talk a lot about tractor
3 drivers and tractors being operated in the
4 presence of workers. It could be that there might be
5 use cases where we would not want to use automated or
6 semi-automated tractors.

7 It would be interesting to know --
8 and I don't know if there's any way to get this
9 data, but it would be interesting to know how many hours
10 tractors are operated in the aggregate in California and
11 then how many of those hours are those tractors operated
12 when there's nobody else around but the tractor driver
13 driving the tractor. I suspect that there's a lot more
14 of the second than of the first. And to the extent that
15 you can use that tractor, at least in those cases and
16 those situations, that will be a huge step forward for
17 safety, I think.

18 I've talked to you guys before about the
19 typical application of a tractor where the tractor is
20 operated by a tractor operator making a pesticide
21 application wearing a respirator and a Tyvek suit. If
22 the tractor operation is not there and the tractor's
23 being operated autonomously, you don't need to worry
24 about whether its respirator is correctly fitted,
25 whether it's got the correct cartridges on it, whether

1 his Tyvek suit is fitting him correctly, or any of those
2 issues, because he's just not there. And that's the
3 safest possible place he could be -- or she.

4 So I'm looking -- I hope that you guys go
5 ahead and decide to impanel an advisory committee. I'll
6 be looking forward to participating on the committee,
7 because I think we found out today there's a lot of
8 issues that we need to talk about and figure out how we
9 can do this, because this technology isn't coming.
It's
10 here.

11 So thank you.

12 CHAIR THOMAS: Thank you.

13 So, Maya, do we have callers on the line?

14 MS. MORSI: Yes, we do. First up is
15 Trent Johnson with Raven Applied Technology.

16 CHAIR THOMAS: Trent, can you hear us?

17 MR. JOHNSON: Yes. Can you hear me?

18 CHAIR THOMAS: Yeah. Go right ahead.

19 MR. JOHNSON: Great. Thank you, Chair Thomas
20 and Board Members, for putting this panel on today. I'm
21 happy to be here talking to this group.

22 My name is Trent Johnson. I represent Raven
23 Applied Technologies, which is a subsidiary of
24 C&H Industrial.

25 Raven is a (unintelligible) agriculture

1 company and we released our first products over 45 years
2 ago. We've been pioneers in technologies such as
3 precision spraying, satellite-guided steering, and
4 vision steering.

5 My role at Raven is product safety and
6 compliance. In addition to those areas, my
7 responsibilities also include functional safety and
8 reliability engineering. My career has included a
9 similar role in the nuclear power industry. Simply put,
10 my career focus has been one of quality and safety. So
11 I'm not here to sell you on the technology, but to
12 assure you that we have a common goal of protecting farm
13 workers.

14 The ag equipment industry prioritizes safety,
15 not only because we want to protect our workers, but
16 because it is our neighbors, our friends, our family
17 that uses the equipment that we build. One of the ways our
18 industry does that is to develop safety standards through
19 global committees, which include representation from
20 manufacturers, technology providers, universities, and
21 government.

22 Our industry also works together in other
23 capacities. This past November the Safety for Emerging
24 Robotics and Autonomous Agriculture, or Safer Ag, was a
25 workshop hosted at the University of Illinois that

1 brought together growers along with members of industry,
2 academia and government to discuss all topics
3 pertaining to the safety of ag technology, including
4 rural connectivity, insurance, research opportunities,
5 societal implication, worker safety standards,
6 standards, regulation, and risk assessment methods.

7 It is the mission of our industry to provide
8 growers with the tools needed to feed a growing
9 population while ensuring the safety of anyone who may
10 encounter our equipment. The task of collecting the
11 data needed to accomplish this mission is immense. We
12 must take measures to ensure that data is relevant,
13 actionable, and verifiable.

14 To demonstrate the effect of safety of these
15 machines, we must also compare the performance of our
16 machines to humans performing the same tasks. This is
17 critical, as it will establish a baseline for which
18 machine data can be compared against. The scientific
19 method requires control data, and this baseline data
20 would be that control element.

21 To be certain, every manufacturer involved in
22 autonomous agriculture has been collecting data, but to
23 my knowledge, we have not been provided specific
24 requirements from the State of California to compare our
25 data against.

1 We urge this body to consider working with
2 manufacturers through the proposed advisory committee to
3 establish what this baseline expectation must be so that
4 we can address these challenges head-on. Raven
5 acknowledges that any update to this regulation must
6 be done so in a manner which protects workers while
7 allowing farmers to maximize their potential to
8 feed the world.

9 Input from all stakeholders is critical.
10 Industry, growers, laborers, academia, and government
11 must work together to make sure we get this right.
12 Raven sees the formation of the proposed advisory
13 committee as the best path forward to accomplish this
14 goal.

15 Thank you for the opportunity to speak today
16 and for your consideration for this advisory committee.

17 CHAIR THOMAS: Thank you.

18 Who do we have next, Maya?

19 MS. MORSI: Up next is Hernan Hernandez with
20 California Farmworker Foundation.

21 CHAIR THOMAS: Hello, caller. Are you with
22 us? Hello?

23 I don't think they're there, Maya. You want
24 to go to the next and we can come back?

25 MS. MORSI: Sure. Up next is Chris Zeitz with

1 Fresno County Economic Development Corporation.

2 CHAIR THOMAS: Chris, can you hear us?

3 MR. ZEITZ: Yes. Can you hear me?

4 CHAIR THOMAS: Yeah. Go right ahead.

5 MR. ZEITZ: Thank you, thank you. And thank
6 you, Members of the Board and panelists for your time
7 today. I know this is a long meeting. I appreciate
8 everyone's thoughts and contributions.

9 Fresno County Economic Development Corporation
10 is a recipient of U.S. Economic Development
11 Administration's Good Jobs Challenge and a partner with
12 the F3 Initiative in the Central Valley that was awarded
13 Build Back Better Regional Challenge Grant focused on ag
14 tech innovation. It creates pathways accessible to the
15 farmworkers that keep our region going and feed our
16 nation.

17 Earlier today I was on a call with one of the
18 executive directors for a community-based organization
19 that represents and works with those farmworkers and is
20 partnering on both of our projects. And I know he
21 wanted to speak today, but I believe he had to leave the
22 call early due to a prior commitment.

23 I am here to talk a little bit about the
24 economic development arguments in favor of revisiting
25 Section 3441, Title 8, through an advisory committee.

1 While California leads the nation in agricultural
2 production and technology, we are lagging behind other
3 states and, indeed, other countries due to some of the
4 limitations with our regulations.

5 Agricultural technology and autonomous
6 agricultural technology represent a significant
7 opportunity for investment in this state and, in,
8 particular, in this region that produces so much of the
9 nation's food, while at the same time suffering from
10 20 percent poverty rate and in areas poverty rate that
11 reaches 40 percent.

12 I've also heard today about the importance of
13 safety, and I would like to also highlight that, while
14 a lot of the conversation has been very important, has
15 talked about physical accidents that occur while using
16 agricultural equipment, it's also important to remember
17 that these vehicles do emit hazardous chemicals, and
18 being physically on the machine makes you more
19 susceptible to that exposure.

20 In 2022, agricultural technology start-ups
21 raised over 2.6 million in venture capital investment,
22 looking to California as a primary market to grow their
23 businesses. In our region, again, a high-poverty
24 region, a high-unemployment region, it's uniquely
25 positioned to channel this investment on the heels of

1 unprecedented federal and state climate-smart ag tech
2 investments still to be pushed out to transform this
3 region's local economy, while at the same time having
4 \$100 million, give or take, in federal and state
5 investments, to upscale the workforce here and to
6 allow them to take full advantage of these opportunities
7 that are coming down, whether we like it or not.
8 Without new policy considerations, private
9 investment will not be able to come into this region and
10 to have those positive benefits.

11 Again, I thank the Board and we thank the
12 Board for your time in considering this important matter,
13 and would ask that an advisory committee be impaneled to
14 further review Section 3441, Title 8. Again, thank you
15 for your time.

16 CHAIR THOMAS: Thank you.

17 Who do we have next, Maya?

18 MS. MORSI: Up next is Anne Katten with
19 CRLA Foundation.

20 CHAIR THOMAS: Anne, can you hear us?

21 MS. KATTEN: Hi. Yes, good afternoon. Can
22 you hear me?

23 CHAIR THOMAS: Go ahead. Yeah.

24 MS. KATTEN: Hi. Yeah. Thank you very much,
25 Chair Thomas and Board Members.

1 I'm Anne Katten from California Rural Legal
2 Assistance Foundation and I appreciate the discussion
3 today and I've learned from it. But I remain convinced
4 that it isn't time yet to start an advisory process for
5 automated tractors, especially for use when any workers
6 will be in a field and the field is not secured.

7 I also think that convening any advisory
8 process is premature because of the backlog of
9 development of other important health and safety
10 regulations currently.

11 I recognize that tractor operators face many
12 safety and chemical exposure hazards that automation can
13 partly prevent. But even if autonomous machines are
14 used in secured fields where there are no workers,
15 there'll be a need to manage the number of machines in
16 the manner of operation to prevent pesticide drift and
17 dust carrying silica and potentially Valley Fever spores
18 from harming workers in adjacent areas, and there'll be
19 additional lockout requirements, probably, for
20 maintenance of these machines, because they're more
21 complicated.

22 Sensors are great as a safety aid to a driver,
23 but not ready, I think, to be relied on as a substitute.
24 And that's what multiple collisions of Teslas on
25 autopilot with emergency vehicles have shown. Sensors,

1 like spray nozzles, can also be knocked off or out of
2 alignment by vines and branches. And I continue
3 to have concerns that safety sensors may not be as
4 well maintained as those that are central to ag
5 production.

6 With regard to retrofit kits, I'm not at all
7 clear which manufacturer would be responsible for the
8 proper installation or maintenance of systems like that,
9 so it's another concern.

10 And, finally, I'm frankly very skeptical of
11 the claim that the intention is just or mostly to use
12 these machines when workers are not -- when workers are
13 not in the field, because driverless tractor violations
14 of section 3441(b) have at times been quite common for
15 the field-packing operations which Jassy described
16 today, and fatalities and very serious injuries have
17 resulted.

18 In addition, the packing and sorting trailers
19 are pulled behind the tractors, so I don't see how the
20 sensor on the tractors are going to see the workers on
21 and around these trailers, especially during night work.

22 So, again, you know, I welcome the discussion
23 today, but I think we have to proceed very carefully and
24 slowly and be mindful of our resources. Thank you.

25 CHAIR THOMAS: Thank you.

1 Maya, do we have any other callers?

2 MS. MORSI: Yes, we do. We have three more.

3 So the next one is Jake Winters from Monarch
4 Tractor.

5 CHAIR THOMAS: Jake, can you hear us?

6 MR. WINTERS: Everybody, I can hear you. Can
7 you hear me okay?

8 CHAIR THOMAS: Yeah. Go right ahead.

9 MR. WINTERS: Fantastic.

10 Thanks for the opportunity to comment and for
11 your patience during this important discussion. I'm
12 Jake Winters from Monarch Tractor, and I do all of our
13 government engagement and I've actually been involved
14 with the Monarch temporary experimental variance since
15 we started engaging with Cal/OSHA staff back in 2019.

16 I want to start with some information on the
17 temporary experimental variance, since it seemed to come
18 up several times during the panel and other discussions.
19 We're happy to join the panel next time and look forward
20 to continuing to provide all the data and guidance we
21 can to the Board and Cal/OSHA staff.

22 On the variance, the operations that are being
23 completed by the three Monarch tractors that fall under
24 the variance reflect the true and current state of
25 operations consistent with how they're completed on

1 non-automated tractors.

2 And to put a finer point on that, people are
3 not in the field during most tractor operations,
4 autonomous or otherwise, not during spring, not during
5 flail-mowing or hedging. It's not safe to be in the
6 immediate proximity of a tractor during most of these
7 operations.

8 Furthermore, the variance explicitly prohibits
9 our vehicles, the three Monarch tractors, from
10 operating within the immediate vicinity of people. I
11 understand that's the desire for some of the new data
12 request that we've seen recently, but to quote the variance
13 directly, when moving in forward or reverse, the tractor
14 shall initiate braking to slow the movement of the tractor
15 and come to a stop when humans are detected within 16 feet
16 way in any direction.

17 And our applications -- the three --
18 in grape crop during harvest time, where most people are
19 around tractors, that's really kind of the primary
20 time where these machines are up close and personal with
21 humans. The 16-foot radius is not feasible for us to
22 actually do any sort of meaningful operation.

23 I also want to provide some clarity. There's
24 three stages of the experimental temporary variance.
25 And moving from stage to stage requires a sharing of

1 several data points as part of the transition and the
2 approval from Cal/OSHA staff. So you can only move from
3 the phases prior to the next ones with the approval from
4 Cal/OSHA.

5 The data that we've been asked to share under
6 the variance includes total distance traveled by the
7 vehicles, total hours of operations in autonomous mode,
8 collision-avoidance instances, instances where the
9 tractor fails to initiate braking, and replacement of
10 any components except for the replacement of in-kind
11 resulting from normal wear and tear.

12 When we completed the first stage of the
13 variance, we submitted data to Cal/OSHA for approval in
14 late 2021. The data shared was as follows:

15 4,442.94 kilometers traveled, 589.57 hours of autonomous
16 operations, 40,498 successful human detections and
17 collision-avoidance instances with zero accidents, zero
18 near-misses, and zero close calls.

19 We also shared, at Cal/OSHA's request, imagery
20 of humans and the obstacles being detected by the
21 collision-avoidance technologies. We answered more than
22 80 questions by email and other forms from the team,
23 ranging from how farm operations and implements work to
24 test results and more. We answered 100 percent of
25 Cal/OSHA's questions.

1 And then Cal/OSHA approved Monarch Tractor to
2 move from Phase 1 to Phase 2 in variance, which now
3 allows us to run autonomous operations without an
4 operator on board, again specifically under the variance
5 and with those three vehicles.

6 It was mentioned during the last petition and
7 again today that the variance should be completed before
8 we make any additional progress on the topic. As a
9 refresher, there are only two ways the variance is
10 completed. There's a Title 8 rulemaking process that
11 begins or the variance simply times out in 2027.

12 So there's not a clear mechanism. And if we
13 are to wait and we are having this be a precursor to the
14 regulatory rulemaking process, we're talking about
15 waiting until 2027 without any sort of other mechanism
16 to move this forward.

17 To wrap up, some of the comments today show
18 the deep misunderstanding, if not total fabrication,
19 about the current state of the technology. Saying
20 things like, "Remote operators won't have any idea why
21 the machine is stopped," or it being totally unknown to
22 the operator what is happening with the machine and
23 that they're having to make these decisions, is simply
24 not true.

25 When a safety feature is triggered, the

1 vehicle immediately goes from operating at its normal
2 speed of two miles an hour to zero miles an hour -- comes
3 to a complete stop. The vehicle sends a notification,
4 including why it stopped, provides a 360-degree
5 live-camera view of what it sees, and waits for further
6 instructions from the remote operator.

7 If the operator somehow is still unsure why
8 the vehicle stopped and reboots the vehicle, it's not
9 going to continue moving; it's simply going to come
10 back with the exact same error, notify them, and it will
11 not move until the issue is addressed. And that's
12 something that we've done in our software layer.
13 This is specifically referring to Monarch technology,
14 but after working with AEM and some of our other
15 colleagues, I can speak generally, most paradigms fit
16 these types of behaviors.

17 We also hear things like, "What if multiple
18 safety alarms happen at once? How do they -- how does a
19 remote operator triage multiple vehicles?"

20 Again, the vehicles are coming to a stop. The
21 operator does not need to stop the vehicles when a
22 safety alarm happens. It notifies them. The vehicles
23 wait for additional instructions from the remote
24 operator.

25 I want to be careful we're not creating

1 fear-mongering or any sort of other things. I want to
2 speak strictly to the current state of the technology.

3 The last one that I heard was, "What happens if
4 a key piece of safety equipment goes down, a sensor or
5 other piece of hardware? What if the operator decides
6 just to run it anyway?"

7 They literally will not be able to operate the
8 equipment in that scenario. The software is constantly
9 monitoring itself. And you heard things like
10 "Heartbeat" and some of the other industry terms today,
11 but essentially the operator will not have the ability
12 to start the machine. The machine will not allow it to
13 move forward unless 100 percent of the components are up
14 and operational and 100 percent of the software is
15 operating normally.

16 We've done outreach to labor unions in a
17 variety of formats, including in-person demonstrations
18 at the World Ag Expo and across a variety of
19 technologies and applications and showcasing of those.
20 They say simply, "We don't ever see a world where
21 there's not a driver on board the tractor, despite
22 some of the safety benefits that's doing so."

23 We're asking you, the Board, to help bring
24 labor, the industry, and all the other relevant
25 stakeholders together so we can have a discussion, not

1 based on fear-mongering, but based on actual data. And
2 these quantities will be allowed -- will actually give
3 us enough information to move forward and have a
4 meaningful carve-out to say this is when and how we will
5 move through the process.

6 Like Dave Thomas said, this needs to be about
7 worker safety. We can start in places where there are
8 already no workers, like those operations we talked
9 about earlier. We can say that autonomous
10 self-propelled machinery can not be used within "X" feet
11 of workers or within these other parameters. Let's not
12 try to eat the entire elephant at once. It's not a binary
13 decision between full autonomous operation for every
14 industry and every operation and every crop or no
15 autonomy at all. We're simply trying to have a dialogue
16 to understand how and where farmers can deploy these
17 technologies, because there are very clear safety
18 benefits.

19 Thank you for your time.

20 CHAIR THOMAS: Thank you.

21 So who do we have up next, Maya?

22 MS. MORSI: Up next is Mitch Steiger with
23 California Labor Federation.

24 CHAIR THOMAS: Mitch, are you there?

25 MR. STEIGER: Yes. Thank you, Chair Thomas

1 and other Board Members and staff. Sorry to double-dip,
2 but we do have a lot to say about autonomous tractors
3 and appreciate the opportunity to speak today.

4 So we definitely would like to respond
5 specifically to this idea that's been floated of going
6 to an advisory committee. But before we do that, we'd
7 like to respond to some of the things that have been
8 said here today throughout this discussion that has
9 covered a wide range of topics associated with
10 autonomous tractors. And that's a good thing. We
11 definitely encourage discussion of these topics.

12 But we would really focus for a second on this
13 argument that this is about safety. We've heard this
14 over and over again from the proponents, that this is
15 about safety, this is about keeping workers safe;
16 therefore, you, the Standards Board, should move in this
17 direction.

18 Frankly, we see this as a chilling argument
19 that because a job is not risk-free we should just
20 eliminate it. The reason it is so scary is that that
21 same argument can be applied to every job. There is no
22 risk-free job out there. And if we look at all of these
23 and say, "You know what, we can't eliminate all the
24 risk; we need to look at getting rid of these," what
25 does that look like on a broad basis? None of us are

1 safe. The technology is coming for all of us. And if
2 that's a conclusion that we draw and then start making
3 decisions based on, it's terrifying to think about where
4 that leads us.

5 And the response to that argument seems to be
6 something along the lines of, "No need to worry; we're
7 going to upscale these jobs; we're going to put workers
8 in air-conditioned rooms with joy sticks and everything
9 will be fine."

10 Well, if that were to happen, that would be
11 the first time that's ever happened in the history of
12 automation that, sure, for a small number of workers,
13 when technology eliminates a job, other jobs are
14 created. They are sometimes higher paying, sometimes
15 much higher paying, doing maintenance or design or
16 control of these machines, but never is it the same
17 number of people.

18 That's kind of the point of this
19 technology. That's why you have venture capital
20 companies pouring tons of money into this idea, because
21 the idea is that down the line we're going to save a lot
22 of money by not paying workers to be here. And,
23 frankly, anyone who's taken an honest look at this issue
24 knows exactly that's what this is all about, and that's
25 what's so concerning for us.

1 And we've also heard over and over again that
2 it's somehow inherently safer to have a machine doing
3 work that a person can do. And, you know, there's all
4 sorts of data all over the news every day about how not
5 true that is. The technology fails all the time. We've
6 all got plenty of examples in our own personal life.

7 If I could take a quick page from
8 Bryan Little's comments and tell a quick aviation story,
9 my friend was a commercial pilot for Alaska Airlines and
10 he told me about a lot of near-misses that he was
11 involved in. And there was one where he was taking off
12 in a plane and he could tell, as he was starting to
13 accelerate, the plane wasn't accelerating as fast as it
14 was supposed to. And he had to make a split-second
15 decision about whether to abort the takeoff and wind up
16 in the trees or keep going, potentially not have enough
17 speed to take off and then maybe the plane crashes.

18 And he decided to go forward. He thought he
19 had maybe enough speed to take off, and did. And, you
20 know, it turned out to be the right decision. It was
21 some hydraulic issue. The plane landed fine and
22 everything was okay. But who knows what an autopilot would
23 have decided? He told me that if he had aborted the
24 takeoff he probably would have killed half the people
25 on the plane, and that's what he was trying to avoid.

1 Maybe a -- you know, automated decision-making
2 system would decide that half is better than everybody
3 and would have made the wrong decision in that case.

4 There are examples over and over that we heard
5 in all sorts of hearings and issues related to this
6 about all the different ways that a human operator can
7 sense risks that a robot can't, that an ADS can't.
8 And that's why we continue to hold firmly to this
9 position that in the interest of worker safety, we
10 need a human operator on these machines. This
11 technology needs to be designed around a person so that
12 the best strengths of a person can be combined with the
13 best strengths of technology to keep workers safe, that
14 eliminating the human being doesn't make any more sense
15 than eliminating the technology, and we need to go
16 forward with that in mind.

17 And, also, with that in mind, we keep hearing
18 this argument that we're falling behind other states.
19 And, you know, to that we say, "Good." If other states
20 are moving forward without enough data that this is the
21 best decision for worker safety, we want to fall behind
22 them. All sorts of decisions are being made by other
23 states these days that we may not agree with. And we
24 very much don't want to look like that, and we strongly
25 believe that this is one of those cases we're doing the

1 right thing by being careful and moving slowly and
2 making the right decisions for worker safety.

3 And we would also really stress to the Board
4 that the function here is worker safety, that whether an
5 industry is pouring a bunch of money into an effort, you
6 know, it's not our responsibility to worry about that.
7 Our responsibility here is to make sure that workers are
8 kept safe.

9 And with that in mind, the process here is a
10 little concerning to us. So this idea, this petition
11 or related petition, has been floated to the Board
12 multiple times. It's been rejected multiple times, one
13 of which was in December, less than three months ago.
14 And here we are now talking about doing exactly what we
15 decided not to do, what the Board rejected in December,
16 in kind of sort of approving the petition and sending it
17 to an advisory committee.

18 And nothing has changed since December, other
19 than, you know, we have not done what that decision said
20 we needed to do, which was get the data that we need,
21 learn more about this. I pulled up the decision. I
22 won't bore you all by reading through it, but trust me
23 when we have not met the conditions laid out in that
24 decision about what needs to happen before we revisit
25 it.

1 And, frankly, we've heard a lot of very
2 concerning things about the Monarch variance. I'd be
3 very interested to hear what Cal/OSHA has to say about
4 the testimony that was just offered by Monarch, as we've
5 heard a very different story about whether or not
6 Monarch has been living up to their end of the temporary
7 experimental variance.

8 And in our eyes, the second that variance was
9 deviated from in any way, it should have gone away, that
10 this was a deal that was struck between that company and
11 state regulators that we have heard a lot of rumors that
12 it's not being met. And if that's the case, the
13 variance should go away and this -- this issue should be
14 put on pause until we know a whole lot more than we do
15 right now about whether or not it's safe.

16 So we would just urge the Board to stick with
17 the decision that it made very recently, that we have
18 this variance that's out there. Nothing has changed
19 since the last decision other than, frankly, some
20 concerning things about whether or not the experimental
21 variance is being met.

22 And we should stick with that. We should not
23 go to an advisory committee in any sort of official way.
24 We've never shied away from a discussion on this issue.
25 We're happy to meet with whoever, whenever, to discuss

1 it. But moving down the road of rulemaking so soon
2 after this petition was rejected, when nothing
3 substantive has changed, we think would be a very
4 premature move and we would urge the Board not to do
5 that.

6 Thank you.

7 CHAIR THOMAS: Thank you.

8 Who do we have next, Maya?

9 MS. MORSI: Up next is Matthew Allen with
10 Western Growers Association.

11 CHAIR THOMAS: Matthew.

12 MR. ALLEN: Good afternoon, Mr. Chair and
13 Members of the Board. Can you hear me okay?

14 CHAIR THOMAS: Yeah. Go right ahead.

15 MR. ALLEN: Good afternoon. I will be brief.
16 Again, I'm Matthew Allen with Western Growers
17 Association.

18 We are really happy and pleased to see this
19 discussion occurring today regarding autonomous
20 tractors. We believe there is a clear need to update
21 Title 8 to allow the use of this critical technology.
22 Western Growers supports the creation of an advisory
23 committee moving forward to further discuss this topic.

24 Thank you again for the (unintelligible.)

25 CHAIR THOMAS: Thank you, I think. I think --

1 was that the end? Thanks.

2 Who's next, Maya?

3 MS. MORSI: I'm just going to circle back to
4 Hernan Hernandez with California Farmworker Foundation.
5 That was one I called earlier but missed.

6 CHAIR THOMAS: Hernan, can you hear us?

7 MR. HERNANDEZ: Yes, I can hear you. Can
8 everybody hear me?

9 CHAIR THOMAS: Yeah. Go right ahead.

10 MR. HERNANDEZ: Yes (unintelligible.) My name
11 is Hernan Hernandez, executive director of the
12 California Farmworker Foundation, a 501(c)(3) nonprofit
13 that works with farmworkers throughout the state of
14 California.

15 First and foremost, I do think that when we
16 talk to workers, we know that safety is at the
17 forefront, right? But we also know that a lot of them
18 want opportunity, and they want opportunity in the way
19 in which they can make higher wages.

20 The way we view technology is what can we do
21 in order to improve the quality of life of the
22 farmworker, and it has to come through economic
23 mobility; it has to come through opportunity. We fell
24 that a discussion needs to occur on what can be done
25 in order to provide more prosperity for the farmworkers

1 throughout the state of California. We think technology
2 provides a perfect avenue to that via education.

3 As of right now, we're participating in the
4 future of food initiatives, upscaling about 2,500
5 farmworkers making over 60-percent increase in wages via
6 technology, via ag tech. We know that this is going to
7 change the life of the population we serve. We know
8 it's going to change the life of the families and of
9 their children as well, as they see education as the way
10 going forward.

11 So we really truly believe that an open
12 discussion can happen between all stakeholders and
13 really come down to the benefit of the farmworker that
14 takes into consideration what their -- what their needs
15 are and what can be done for them.

16 I feel like a lot of times we engage in these
17 discussions, but the missing link within the discussion
18 is the farmworker. And as a former farmworker myself,
19 I spent 15 years working in the fields; I've seen what
20 the needs are; I've also seen how technology has helped
21 improve farmworker lives.

22 When I was growing up in the table grape
23 industry, the majority of the injuries that happened
24 were through the cart wheel. People would hurt their
25 back. People would fall down. A couple of years ago they

1 invented the Burro. The Burro is an automated system that
2 now carries all the 20- to 25-pound boxes from the field all
3 the way to the packer, therefore alleviating the majority of
4 the injuries that happen in that industry today.

5 So I definitely would encourage that we have a
6 discussion; if an advisory group is created, then that
7 we have farmworkers in mind. And when I talk about
8 farmworkers, we're talking about farmworkers that are on the
9 ground. Farmworkers are going to be impacted through this --
10 through these efforts, because I think that's the
11 critical missing link here. And we encourage discussion
12 and we would encourage us to help facilitate those
13 discussions as well for farmworkers that therefore they
14 can have a say in this discussion.

15 So, lastly, just want to say that we embrace
16 technology, we want a better future for our workers, and
17 we know for a fact that when we capture our surveys,
18 workers just want more opportunity to create higher
19 economic mobility within themselves and their families.

20 CHAIR THOMAS: Thank you.

21 MR. HERNANDEZ: Yeah.

22 CHAIR THOMAS: Do we have any other online
23 callers, Maya?

24 MS. MORSI: We do not have any more panel
25 commenters.

1 CHAIR THOMAS: All right. Yeah, go ahead.

2 MR. MIILLER: Thank you, Chair Thomas and
3 Board Members. Again, I just want to thank you and I'll
4 be very, very brief. Thank you for what you're doing today.
5 Thank you for looking into the issue. It is greatly
6 appreciated.

7 And I just want to associate myself with some
8 of the comments that were just made. One is we agree
9 the Board needs to focus on priorities. You need to
10 really -- you have limited resources. We understand
11 that. We genuinely believe this is a priority. When
12 you have a 50-year-old regulation that's based on
13 80-year-old technology that doesn't in any way reflect
14 how to make workers safer today, that regulation on its
15 face deserves a bigger discussion. And please look into
16 it; figure out how we can possibly fix that regulation.

17 We also agree that it's important to gather
18 data and to have the conversation about it and have a
19 dialogue about it. The only way that that happens,
20 though, is if you create some venue, avenue, for
21 people to come together to share that data, to gather
22 that data, and to look at what we can do.

23 And while I appreciate that we have had two
24 petitions that have failed, this ain't that. Those two
25 petitions, both of them, offered individual specific

1 amendments to Section 3441.

2 We're taking a different approach here. With
3 this, we're saying we're not offering you the solution;
4 we're asking you to come collaboratively with labor
5 unions, with the academics, with the manufacturers, with
6 your staff, with the ag community, and figure out what
7 is the right way to amend 3441 in a way that is the highest
8 priority protection for workers in a way that reflects
9 the technology and the science that's available today.
10 The only way you'll get there from here is through some
11 kind of an advisory committee process or some ability to
12 bring people together, have the conversation.

13 Again, thank you very, very much for your
14 time. It's greatly appreciated.

15 CHAIR THOMAS: Thank you.

16 And do we have any other commenters? All
17 right.

18 The public comment period is now closed.

19 UNIDENTIFIED SPEAKER: (Unintelligible.)

20 CHAIR THOMAS: Oh, yeah, always open to the
21 Board.

22 MS. LASZCZ-DAVIS: Okay. I just wanted to
23 clarify.

24 I appreciate everybody's comments. You know,
25 just a few observations, for what it's worth. I mean, I

1 think one of the things that we heard, clearly, was that
2 with the need for greater agricultural capacity to feed
3 the growing world population, one of the reasons for
4 autonomous tractors in agricultural fields, we also heard.
5 that there has been difficulty, a fair amount of difficulty,
6 in finding workers to take the higher-risk roles in the
7 field. There's got to be some way to deal with that.

8 We've also -- you know, we spoke at -- it's
9 been interesting. Some of the discussion has centered
10 around this as being a technology of the future. The
11 truth is, we're here already, and it's been around for
12 anywhere from seven to ten years. And when it's here,
13 we need to deal with it. I don't think we have a
14 choice. And what we need is to bring people together so
15 that we can inform each other as to how to implement
16 this properly and, if necessary, how to modify the
17 regulations.

18 I did hear some concern expressed about the
19 fact that if we have an advisory committee, we'll be
20 moving fast forward into a rulemaking process, correct,
21 (unintelligible), Chris; I think you mentioned that
22 there is a pre-rulemaking venue for an advisory committee
23 as well. Is that true?

24 MS. SHUPE: Yes. So advisory committees take
25 place during the pre-rulemaking investigation.

1 And everybody's quite right to note that we do
2 have resource restrictions that are inescapable. But if
3 you -- just going back to my executive officer's report
4 earlier today, we've conducted -- I believe we're on our
5 fourth advisory committee meeting for either firefighter
6 personal protective equipment -- it's the third. And
7 then fourth for walking working surfaces.

8 When we're dealing with complex issues, this
9 is not a fast-forward process. This is one where we
10 engage, we bring everybody together, we talk about the
11 issues that are relevant.

12 MS. LASZCZ-DAVIS: And thank you for that.

13 And, given that, I think it's important that
14 we move towards some sort of an advisory committee
15 process. I think the best thing we can do for all of
16 us, for our farmworkers, for the California workers, is
17 to get educated and informed so that whatever transpires
18 comes from real sound, reasonable anchors of knowledge.

19 And I don't know whether or not this is the
20 right place to do it, but I'd like to offer a motion,
21 unless somebody else wants to share something at this
22 point.

23 MS. STOCK: Well, I would like to comment on
24 the advisory committee. And so I don't know whether I
25 should do this now or after you have a motion or -- but

1 I guess I can make a few before you do that, Chris, in
2 advance of the motion.

3 I -- I would strongly -- I plan to vote
4 against it, if you make that motion, and I would
5 strongly urge us to vote against it. And I'll just give
6 a few reasons now.

7 First of all, in the context of what we heard
8 this morning about the urgent issues in front of the
9 Board and when I asked specifically what is it that
10 causes the delays, Eric was talking about all the
11 resources that are needed to do -- to do this.

12 We are asking the Board or the Division to
13 take on a complicated process, and that is going to use
14 resources that I feel like are not warranted at this
15 point and not as urgent as the other issues that are in
16 front of the Board.

17 And I want to say, also, that we have -- I'm
18 glad that we had this panel. I know many Board Members
19 traveled to go to the Ag Expo. So I think we can say
20 that we have given quite a bit of conversation and
21 discussion and time to this, more than is often provided
22 to many other issues that were talked about. I don't
23 remember a similar panel around workplace violence or
24 indoor heat, et cetera.

25 So we have been trying to make opportunities

1 for the stakeholders to come together outside of the
2 advisory committee process, which is something that
3 needs to be organized and facilitated and managed by a
4 very over-stretched staff. So I think there is nothing
5 that precludes us from continuing to host panels like
6 this to invite stakeholders to come and give testimony
7 at public hearings, like they have been. When more
8 information comes, there's nothing to preclude people
9 coming to share it.

10 So I would strongly urge us not to give the
11 burden of an advisory committee at this critical moment
12 where so many other urgent issues are -- are pending,
13 but encourage people to create -- to use these other
14 opportunities to share information.

15 And I also feel like, you know, again, we -- we
16 looked at this in December, and at that time we did
17 discuss this and we said we wanted to wait for something
18 to happen to get data from this experimental variance,
19 which we have not gotten.

20 Not only have we not gotten it, I think we've
21 learned that the data that's being collected is not what
22 we expected. I think both the gentleman from Monarch
23 and we heard earlier during the panel said that they
24 have not -- that has not included situations where
25 workers are in the field, in spite of the fact, as the

1 Division said, that that was the requested expectation.
2 There has been no talking to workers at that point,
3 because they weren't there.

4 So -- so I have a lot of concerns about now
5 agreeing to something that we had just a few months ago
6 said we did not want to do until we got that
7 information. So I would urge my fellow Board members to
8 -- to not vote for an advisory committee at this point.

9 When the experimental variant comes with more
10 information, as we get more information that
11 stakeholders bring to either other panels like this or
12 to public testimony, we can then make that decision at a
13 later point, but I don't think we're ready to make it
14 now.

15 CHAIR THOMAS: Any other comment from any
16 other Board Member?

17 MR. HARRISON: Yes, I have some
18 comments.

19 CHAIR THOMAS: Yeah. Go ahead, Dave.

20 MR. HARRISON: So first I'd like to say that
21 -- just to kind of clear the -- you know, get the record
22 straight -- and I'm going to turn my camera off, because
23 I don't like looking at myself while I speak.

24 CHAIR THOMAS: You're not the only one, bro.
25 You're not the only -- no. Go ahead. Go ahead. Sorry.

1 MR. HARRISON: So -- so I thoroughly enjoyed
2 attending the Ag Expo. I was there. I loved
3 interacting with some of the manufacturers, including
4 Sabanto and some others. That was great. I look
5 forward to future education.

6 I think that the advisory committee process --
7 I think we're putting the cart before the horse a little
8 bit. The Division kind of stepped ahead of us or --
9 rightfully so, and granted a temporary experimental
10 variance, which we heard testimony from the Division
11 today that the applicant is not living up to the terms
12 of.

13 But I think we should collect that data. I
14 think Mr. Trent Johnson nailed it when he said, "safe,
15 reliable, and verifiable data moving forward." I think
16 all the Board Members would agree with that comment, and
17 I think we've got to continue to collect data that meet
18 all that criteria.

19 Mitch Steiger said we shouldn't be following
20 other states like Texas. If we followed Texas, what
21 would that do? I mean, that wouldn't do anything for
22 us.

23 And so I would make -- I'm going two
24 directions here. One, I agree with Laura. I don't
25 think an advisory committee is appropriate at this time.

1 And I would also -- and I don't know if there's -- if we
2 have the right or ability to request that any future
3 temporary experimental or any sort of a variance around
4 this technology be granted, that it go through this body
5 and not the Division.

6 I mean, I know they have administrative --
7 or procedural rights to do that, but I think this is
8 such a sensitive subject that if there are any future
9 variances granted, that they should -- they should
10 come through this body so that there's actual stakeholder
11 involvement through the Board and not just staff
12 granting these variances.

13 So that's -- that's all I'd like to say.

14 CHAIR THOMAS: Thank you.

15 Anybody else?

16 MS. KENNEDY: (Unintelligible.)

17 CHAIR THOMAS: Sure.

18 MS. KENNEDY: I guess I have a question for
19 the Division.

20 So I -- when I heard Mr. Yap speaking earlier,
21 what I heard was that maybe there was miscommunication
22 about the terms of the variance. And I'd like, I guess,
23 the Division to clarify if Monarch is violating the
24 terms of the variance agreement or what exactly is
25 happening.

1 UNIDENTIFIED SPEAKER: (Unintelligible.)

2 MS. KENNEDY: Okay.

3 MR. BERG: So, yeah, there's many conditions
4 in the experimental variance. And, as Yancy said, the
5 purpose was for the -- for us to get real data on how
6 these tractors interact with people in the field, and we
7 have not gotten that data. But it's not through any
8 malicious attempt by Monarch, just the situations
9 they're using haven't, you know, presented that
10 opportunity. So we haven't been getting data.

11 So the tractors are operating when there's no
12 people around so tractors are not endangering
13 employees, so we don't feel like the experimental
14 variance should be pulled because we're hoping in the
15 future they can look at situations where people are
16 there. And they have done staged interactions where
17 they intentionally put -- I don't know, Yancy, is it a dummy,
18 or just have someone standing in front? But they do --
19 they've done staged interactions, which is not sufficient,
20 'cause it's all planned ahead, but it's a first step.

21 I'm not sure if I'm answering your question,
22 but --

23 MS. KENNEDY: Yes. I guess basically my
24 question might have been, when the emergency or the
25 experimental variance was granted, I mean, was it

1 specifically stated we want this used in conditions
2 where people are working in the fields?

3 MR. BERG: I don't have it in front of me.

4 I don't know, Yancy, if you want to be --
5 remember the exact --

6 We have -- I don't know -- 25 conditions in
7 that variance and I can't remember the exact wording.

8 CHAIR THOMAS: Yeah.

9 UNIDENTIFIED SPEAKER: (Unintelligible).

10 CHAIR THOMAS: Your day's not over yet.

11 MR. YAP: The intention of the experimental
12 variance was to have people in the field when we were
13 conducting -- when they are running the tractor in
14 autonomous mode. The -- that's -- that's not what we
15 received, because it just so happened that, the way they
16 ran the tractors, the workers were not present.

17 MS. KENNEDY: So I guess that may have been
18 the intention, but was that a stated condition?

19 MR. YAP: It wasn't an explicitly stated
20 condition; it was discussed verbally. But we did not
21 know that -- you know, we made it clear during
22 discussions that that's what we wanted, but it wasn't
23 something that was legalistically stated on the
24 conditions.

25 MS. KENNEDY: Okay. I guess I'm just -- I

1 just -- there have been several comments made during the
2 discussion that Monarch is in violation of their
3 emergency variance because they haven't provided these
4 conditions in their testing. And I'm just trying to get
5 at if that's the case or not. That's all.

6 CHAIR THOMAS: So I guess, fellows, the -- the
7 question really is are they going to have data at some
8 point where the autonomous vehicle is going to be
9 working with people so that we have some data to look
10 at?

11 MR. YAP: Well --

12 CHAIR THOMAS: Is that a condition that was in
13 the variance?

14 MR. YAP: I think we're going to have to make
15 changes to our experimental variance conditions and be
16 more specific as far as what's expected and what data
17 we're looking for. We're going to have to make changes
18 to our existing experimental variance.

19 CHAIR THOMAS: I think that's fair, because
20 otherwise it -- you know, it doesn't make sense.

21 So I'll just put my two cents in. And I think
22 -- I don't think a motion is in order or necessary at
23 this point, because we're not going to have any data to
24 look at.

25 So until we get to the point where we have

1 something to look at and we have something that will
2 tell us whether this is safe in these conditions or not
3 with humans, I don't see the point of having an
4 advisory committee at this point 'til we have that data.
5 And as far as that goes, I'm not going to allow a
6 motion 'til we have some, because it doesn't make sense
7 otherwise.

8 MS. LASZCZ-DAVIS: Can I say something?

9 CHAIR THOMAS: Sure. No, go ahead.

10 MS. LASZCZ-DAVIS: Let me push back on that
11 just a little bit here. If the intent -- and I'm not
12 sure I disagree with you entirely, but I don't think,
13 moving forward, an advisory committee precludes Monarch
14 from getting the data that it needs, and I don't think
15 it precludes setting up a process within California that
16 allows everybody to get educated.

17 You know, it's nice to say, "yeah, you know,
18 you can come to the meetings and provide your comments
19 in the public domain," but do we really do anything as a
20 result of that?

21 That's an opportunity to be heard. It's not
22 an opportunity to take action necessarily. And the only
23 time I've seen us really move forward, advance that
24 ball, is within an advisory committee process. Granted,
25 it's not perfect, but I'm not sure leaving this issue

1 to public comment is going to translate to anything
2 other than public comment five years from now.

3 So how would you address that?

4 CHAIR THOMAS: No, I think -- I think you're
5 -- I don't personally have a problem with an advisory
6 committee or kind of what we staged today, but I think I
7 do have a problem with having an advisory committee that
8 it's really based on no information. I mean, we can
9 still talk and we can do all that. We can have another
10 panel. But, you know, that's -- you know, that's
11 putting a lot of time and effort into something where we
12 don't have any data to look at. And I think we could have
13 one when we have data. I have no problem with that. But I
14 don't think that that's now.

15 And I think the conditions of the variance
16 need to be reworked between you and Monarch so that
17 we're going to have something to look at that will give
18 us some information. That's all -- that's what I'm
19 saying, because I --

20 MS. STOCK: If I could just -- sorry. Go
21 ahead, Dave.

22 CHAIR THOMAS: Go ahead, Laura. I'm not going
23 to stop you anyway. Go ahead, Laura.

24 MS. STOCK: No, no, no. Go ahead. Finish.
25 I'll --

1 CHAIR THOMAS: No, I think I made my point.
2 Yeah, go ahead.

3 MS. STOCK: I was just going to respond to
4 Chris' point. I think my concern about the advisory
5 committee is precisely how you defined it, is that
6 that is something that is typically moving towards
7 action as opposed to just sharing, you know, more
8 information. And that's what I feel like we are not
9 ready for, that I think we're still in the, you know,
10 gather data, bring it to the Board through the
11 mechanisms that we already have.

12 And then at the point where we have that
13 information and we're ready to set up an advisory
14 committee to actually --as a prelude to taking action,
15 will have the data that we need.

16 And, you know -- and, again, I just want to
17 recognize and appreciate that the Board did set this
18 panel up, which is, again, unusual. I haven't seen very
19 many of these in all my years on the Board. So I think
20 there has been quite a bit of effort to try to create an
21 environment where multiple voices are heard and can
22 discuss. And we can continue to do things like that if
23 -- if it seems useful.

24 CHAIR THOMAS: Thank you, Laura.

25 So any other questions? Any other comments?

1 MS. CRAWFORD: Can I just ask a clarifying
2 question?

3 CHAIR THOMAS: Sure.

4 MS. CRAWFORD: And this is about the data
5 piece, right. Am I hearing, Dave, that the only
6 acceptable data is the data from Monarch for us to be
7 able to move forward? Because I thought that was what I
8 heard, but I can't imagine that's right.

9 CHAIR THOMAS: Well, for -- for this
10 particular variance, it is between the Division and
11 Monarch, correct?

12 MR. YAP: Yes.

13 CHAIR THOMAS: But I don't have problem with
14 other information that would be included with that.
15 But, yeah, I mean, there's plenty of information that
16 can be gathered from other places.

17 MS. CRAWFORD: For an advisory committee?

18 CHAIR THOMAS: For an advisory committee. But
19 I don't think it's pertinent to set up an advisory
20 committee 'til we have the data we're talking about from
21 Monarch. And that can be arranged between the Division
22 and between Monarch and then we can get -- you know, over
23 time, may not be as long as you think. It may be a
24 few -- months may not be that long -- that we have some
25 actual data that may be pertinent to the conversation.

1 MS. CRAWFORD: Well, and Monarch could -- is
2 probably still listening.

3 MS. SHUPE: Can I make an interjection?

4 And this is just a point of process, because
5 the Division, through the Labor Code, has authority over
6 the temporary experimental variance process. That is
7 the complete extent of their authority when it comes to
8 safety regulations. And I think that it's important to
9 know that your Board staff would be the staff that would
10 be working on any data gathering from the industry
11 outside of Monarch.

12 CHAIR THOMAS: Yeah, that's -- I mean, that's
13 -- yeah, that's reasonable.

14 MS. LASZCZ-DAVIS: So -- oh, Eric, you wanted
15 to say --

16 MR. BERG: Jason had some information to
17 provide about the -- having workers there or not, how
18 it's (unintelligible.)

19 JASON: Based on our last discussions with
20 Monarch, the type of operations that they are using the
21 tractors that are under the variance typically do not
22 have employees in the field. So it probably would not
23 be a situation where they would be -- we could alter the
24 variance to have them use the same tractor at harvesting
25 or somewhere else where there might be employees in the

1 field. It was for spring and other weeding operations,
2 where employees would not be there. That's how they
3 described it to us.

4 CHAIR THOMAS: So is -- I have a question for
5 the -- for the Board Members to comment on is that what
6 we expected or not? And I'm not sure that I expected
7 that, but --

8 MS. LASZCZ-DAVIS: So, first off --

9 MR. BERG: No. That's not what we expected.
10 We were hoping to get interaction with humans, but I
11 guess in these -- we have, what, two sites. And
12 from what I understand, these two sites where the
13 tractors are used, there's not -- Jason, correct me if
14 I'm -- or Yancy -- there's just -- how these tractors
15 are used at these two specific sites, there's not an
16 opportunity for this human/tractor interaction.

17 CHAIR THOMAS: Yeah.

18 MR. BERG: We'd have to find another site for
19 them to use these tractors, maybe, or that's -- so I don't
20 -- we'd have to talk, too, more if these two sites where
21 they're at right now, whether that can be -- if there
22 are situations where people would be in the field with
23 the tractors, maybe some other tractors that they
24 have at these --

25 CHAIR THOMAS: Yeah, I --

1 MR. BERG: -- sites, but we don't know that.

2 CHAIR THOMAS: I mean, there's -- to me,
3 there's two things here. One is I understand the
4 operation of an autonomous vehicle where they're
5 spraying and chemicals and poison, you know, that's
6 harmful to humans. And somebody is driving this
7 vehicle. It's harmful to them and they're going to be
8 all masked and Tyvex or whatever they need to protect
9 themselves.

10 But the bigger part of this is these
11 autonomous machines working with and around humans that
12 are not running them. That's the bigger, more broad
13 application. And I think that's what we're trying to figure
14 out overall is, okay, is it going to be as safe as when
15 somebody is operating the machine as -- is it going to
16 be as safe as when somebody is not and it's being done
17 autonomously? Did I say that right?

18 Anyway. So, yeah. Anyway. So that's -- I
19 think that's what a lot of us thought this was more
20 about, was both of those things together and having data
21 on them. Okay?

22 MR. HARRISON: In response to your question,
23 Dave (sic), if I could?

24 CHAIR THOMAS: Sure.

25 MR. HARRISON: I think you said did the Board

1 know what to expect?

2 And I say the answer's no, because we didn't
3 even -- the Board didn't know that such a variance
4 application was ever even submitted. Didn't even know
5 that it was submitted, discussed, granted, or anything
6 until after the fact. So I didn't know what to expect.

7 MR. BERG: Yeah. We're working on increasing
8 transparency for that, like, have -- setting up a web
9 page where we list all our experimental variances. So
10 this was a good less --

11 CHAIR THOMAS: That's probably a good idea.

12 MR. BERG: Yeah.

13 CHAIR THOMAS: Probably is.

14 MR. BERG: This was a good lesson for us.

15 MS. KENNEDY: Well, I think I just want sort
16 of wanted to back up what Kate's comment was getting at
17 was -- and I -- I didn't think that -- I mean, people
18 are calling for an advisory committee meeting. I -- I
19 didn't think that was in response to the emergency -- I
20 keep saying "emergency" -- experimental variance. I
21 thought it was just a call for, "Hey, let's have a
22 conversation about this and bring the parties together
23 so we can figure out what everyone's concerns are and
24 answer them."

25 So I may be a little process-confused. And

1 so, you know, if we're -- I didn't even think it's our
2 place to do an advisory committee for the experimental
3 variance. That's -- right? I don't know.

4 Anyway, but to the point Kate was making is I
5 think there's plenty of data out there, probably, that
6 can be looked at with respect to this issue. The
7 reliance on the Monarch data -- I mean, even if we were
8 waiting for that, that's a really tiny data set. Why
9 would we base all our decisions on that?

10 MS. LASZCZ-DAVIS: That's right.

11 MS. KENNEDY: You know, we need to look at
12 other data that's out there if we want to make
13 data-driven decisions. If we don't, then forget it.
14 So.

15 MS. LASZCZ-DAVIS: And if I might follow it
16 up.

17 And, actually, Christina's clarification of
18 the two authorities, if you will -- the two purposes,
19 you know -- helped -- helped me get to the point where I
20 still have to say I'd like -- at least I'd like to put a
21 motion on the table and see where the vote takes us,
22 because I too did not see our discussion or the panel
23 revolve around the Monarch situation alone. This is a
24 broader industry issue. And any process that we can set
25 up to begin to educate ourselves and each other, you

1 can't lose.

2 So with that, I'd still like to put forth a
3 motion on the table.

4 MS. STOCK: If I could just make one other
5 comment before we vote on that -- or you put that out.

6 I think the issue is we have been hearing -- I
7 think we've had quite a bit of stakeholder engagement on
8 this issue. We had a panel where we heard a diverse
9 group of voices. I think we've gotten quite a bit of,
10 you know, testimony from -- from manufacturers, from
11 people who are farmers, from labor, and others. So I
12 think the system that we have now has provided quite a
13 bit of -- of opportunity for stakeholder to -- to share
14 their concerns.

15 I think what -- what you're saying, and I
16 don't disagree, that what we need to move forward to
17 action is -- is data that -- first of all, the
18 experimental variance was designed to do. I agree it's
19 not the only thing.

20 And, you know, there are other ways we can
21 direct the Division to collect data. We can do things
22 like that that are short of setting up a formal advisory
23 committee that takes us on a pathway to taking action
24 that we're not ready to take.

25 And my other concern is the extreme limited

1 resources of the Division. And, as we discussed this
2 morning, various other items that are urgent and are not
3 -- where there aren't the resources to attend to them.
4 There's a call for another lead advisory committee,
5 workplace violence committee, et cetera.

6 So I support your right to put that motion on
7 the table, Chris. I think, you know, you should do that,
8 and I'll be voting against it. But I agree. You should
9 have the opportunity to see where the vote takes it.

10 MS. SHUPE: Laura, can I just clarify for you
11 that any advisory committee meeting wouldn't be
12 conducted by the Division. The Division doesn't have
13 authority over safety regulations.

14 MS. STOCK: Oh, so then it would be the Board?

15 MS. SHUPE: It would.

16 MS. STOCK: Okay. So then I meant --
17 substitute what I said about resources. I mean the
18 Board. I think your resources are extremely limited as
19 well.

20 MS. SHUPE: They are. And I would not be the
21 -- it would not be the first time I've even said that in
22 this meeting.

23 MS. STOCK: Yes, yes, you have.

24 MS. SHUPE: I would say that I don't have any
25 senior safety engineers that I could assign to an

1 advisory committee at this time. But we do prioritize
2 our work and we move things forward as we can. What we
3 need from this Board is do you think that this issue is
4 worth discussing.

5 CHAIR THOMAS: So --

6 MS. LASZCZ-DAVIS: I -- I think it's worth
7 discussing and I have full faith in Christina and her
8 staff to decide the priority of this in line with the
9 others. Amen.

10 CHAIR THOMAS: So you can make your motion if
11 you -- if you want to.

12 MR. HARRISON: I respect the authority of the
13 Chair, but I would agree with some of the other comments
14 as well, Dave. But I completely respect your authority.
15 But to allow the motion to come forward, I don't have a
16 problem with that either.

17 MS. LASZCZ-DAVIS: You know what? If you
18 guys don't like it, you're going to vote it
19 down anyway. So who cares?

20 Well, let me put it forth and we'll see.
21 We'll see where it goes. Are you okay with that?

22 CHAIR THOMAS: Yeah.

23 MS. LASZCZ-DAVIS: You good with that, Dave?
24 Laura? Okay. Good.

25 MS. STOCK: Yes. I -- I support your right to

1 put that forward, Chris. Go for it.

2 MS. LASZCZ-DAVIS: Thank you. Okay.

3 This is the motion I'd like to put on the
4 table: The Board directs staff to convene an advisory
5 committee of relevant stakeholders, including members of
6 the agricultural, labor, and occupational safety
7 committees, to consider potential amendments to Title 8,
8 section 3441. The committee will consider possible
9 changes to safely incorporate autonomous agricultural
10 equipment in California farming, including consideration
11 of incident data.

12 CHAIR THOMAS: So we have a motion on the
13 table.

14 MS. KENNEDY: I'll second that.

15 CHAIR THOMAS: So we have a motion and second.
16 Is there any other comment?

17 Hearing -- hearing none, then, Sarah, where
18 are you?

19 MS. GONZALEZ: I'm going to step in for Sarah.

20 CHAIR THOMAS: Oh. Thank you.

21 MS. GONZALEZ: No problem.

22 CHAIR THOMAS: Autumn, can you call the roll,
23 please.

24 MS. GONZALEZ: Member Burgel.

25 CHAIR THOMAS: She's gone.

1 MS. GONZALEZ: Oh, I'm sorry. I should know
2 that. Member Crawford.

3 MS. CRAWFORD: Aye.

4 MS. GONZALEZ: Member Harrison.

5 MR. HARRISON: No.

6 MS. GONZALEZ: Member Kennedy.

7 MS. KENNEDY: Aye.

8 MS. GONZALEZ: Member Laszcz-Davis.

9 MS. LASZCZ-DAVIS: Aye.

10 MS. GONZALEZ: Member Stock.

11 MS. LASZCZ-DAVIS: She's still there.

12 MS. STOCK: I'm sorry. No. No. Sorry.

13 MS. GONZALEZ: Got you. Chair Thomas.

14 CHAIR THOMAS: No.

15 So it's tied. You would have to have four
16 votes to win anyway. So at this point it did not pass.

17 But I do want everybody to understand that
18 this will probably happen at some point in the future.
19 I think that it's necessary, but I also think you have
20 to have -- which I don't think we have access to right
21 now, but we could get over the next few months -- is
22 just data that shows us.

23 And we're not opposed to that in any way.
24 We're not opposed to the idea of automation, but there
25 are -- you know, we have -- our agenda is to protect

1 employees, and we have to do that. We have no other
2 choice. It's got to be as safe or safer than what we
3 already have in place.

4 And so keep -- I mean, I think you should keep
5 communicating. And we have no problem with that. And I
6 think at some point in the future, we probably will have
7 some advisory committee on this. But I don't really
8 think it's appropriate and I think that the Board has
9 expressed that at this time we don't feel that it's
10 appropriate, at least some of us, not all of us, that
11 until we have some more access to data and we have it in
12 our hand and we can evaluate it, that it just wouldn't
13 be appropriate.

14 So thank you. So do we have anything else to come
15 before us at this time?

16 MS. SHUPE: Just new business.

17 CHAIR THOMAS: Which is ...

18 All right. So I'm going to go through the --
19 do any of the Board Members have any questions for staff
20 or items that they would like to propose for future
21 Board agenda items? We kind of went through that already,
22 but, okay.

23 MS. KENNEDY: I know everyone's anxious to get
24 going. I just have a quick question about where we're
25 at with -- I don't know what it's called -- the

1 avalanche people.

2 MS. SHUPE: So we have staff assigned
3 currently working on combining two different rulemaking
4 projects that were initiated as a part of petitions,
5 and we're trying to merge those into a single rulemaking
6 to move it forward more efficiently.

7 MS. KENNEDY: Thank you.

8 CHAIR THOMAS: Any other questions from Board
9 Members?

10 All right. So we don't have a closed session,
11 Autumn?

12 MS. GONZALEZ: No.

13 CHAIR THOMAS: All right.

14 So the next Standards Board regular meeting is
15 scheduled for April 20th, 2023, in Sacramento and via
16 teleconference and video conference. Please visit our
17 website and join our mailing list to receive the latest
18 updates.

19 Thank you for your attendance today.

20 There being no further business to attend to,
21 this meeting is adjourned. Thank you.

22 (End of recording)

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	89:25;93:21;96:20; 114:6;117:23;149:7	accuracy (3) 32:1;58:9;59:9	52:5;141:17;147:3	139:18;141:7; 166:22;222:2;230:23
§	abuse (3) 37:6;57:19,19	achieved (3) 27:16;33:24;127:2	add (13) 52:6;80:1;84:19; 91:1;112:12;131:4; 132:6;139:7;155:6; 161:12;173:16; 174:20;175:4	advanced (1) 185:16
\$100 (1) 198:4	abusing (1) 22:1	acknowledge (1) 154:2	addition (8) 26:25;32:7;99:21; 103:7;109:17;164:24; 193:6;200:18	advancements (2) 46:23,25
\$21,000 (1) 20:17	abusive (1) 44:17	acknowledged (1) 33:12	Additional (2) 39:25;144:23	advances (2) 105:15;125:25
\$46 (2) 158:3,11	academia (7) 64:21;106:15; 112:5;158:17;183:17; 194:2;195:10	acknowledges (1) 195:5	additions (2) 19:24;20:3	advantage (2) 123:21;198:6
\$46-an-hour (1) 169:2	Academics (2) 28:7;219:5	acquired (2) 106:22;108:15	address (30) 7:25;8:19;9:14,21; 11:24;12:18;30:4; 31:3;33:15;36:18; 46:12;51:11;53:1; 56:6;62:12,18;86:5; 99:20;100:3;104:19; 115:3;133:20;144:14; 145:13;172:11; 178:20;180:10;182:9; 195:4;231:3	advertised (1) 182:20
\$50 (1) 188:19	Academy (1) 107:14	acquisitions (1) 64:14	addressed (6) 33:24;54:8;62:11; 99:21,23;205:11	advised (2) 23:19;64:21
\$70 (2) 188:18,23	accelerate (3) 85:15;88:15;210:13	acres (2) 64:8;124:19	addresses (2) 47:6;139:23	advisory (103) 15:16;17:7,9,13,23; 19:1;21:11;28:10,19; 33:13;61:23;62:16, 19:64;22,23,25;65:4; 75:14;80:12;81:16, 21:82;19,22;88:24; 92:4,6,11,13;96:16; 102:14,15,18;110:20; 112:2;118:18;119:11, 18,19;150:9;152:6,9, 18,24;153:9,12,13,20; 155:7,12;180:14,18; 182:21;183:18,19,21; 186:18,20;187:8,13; 188:1;192:5;195:2, 12,16;196:25;198:13; 199:4,7;208:6; 212:17;213:23; 214:22;217:6;219:11; 220:19,22,24;221:5, 14,24;223:2,11; 224:8;225:6,25; 230:4,13,24;231:5,7; 232:4,13;233:17,18, 19;237:18;238:2; 239:22;240:4,11; 241:1;242:4;244:7
\$90 (2) 189:19;190:17	accelerating (1) 210:13	act (2) 9:10;13:9	addressing (3) 8:23;12:22;33:6	advocate (1) 118:17
\$90-million (1) 189:17	accept (1) 176:20	action (17) 31:4,8,22;32:24; 35:13;62:21,23;73:3; 91:14;99:8;179:24; 185:3;230:22;232:7, 14;239:17,23	adequate (2) 42:7,11	advocates (4) 14:21;16:6;58:12; 154:18
*	acceptable (5) 120:16,20;121:20; 123:14;233:6	actionable (1) 194:13	adjacent (1) 199:18	advocating (1) 118:15
*6 (4) 8:20;12:19;29:11, 15	accepted (1) 77:10	actions (1) 185:21	adjoined (4) 77:4;177:2,19; 245:21	AEM (2) 142:5;205:14
^	access (10) 8:8;12:7;27:4; 109:12,13,16;115:2; 117:16;243:20; 244:11	active (10) 42:2;58:22;108:9; 114:22;116:10,11,19; 164:7,11,17	adjoining (1) 199:18	Aerosol-transmissible (1) 79:25
cause (1) 227:20	accessed (3) 7:12;11:11;116:16	actively (1) 67:12	adjustments (3) 52:17;129:6;168:24	aerospace (2) 121:23;165:3
A	accessible (1) 196:14	active-shooter (1) 42:5	Administration's (1) 196:11	affecting (2) 20:23;136:25
abate (1) 58:18	accident (3) 133:14;136:21; 189:5	actor (1) 109:15	adopt (6) 40:3;44:9;72:13; 73:5;74:2;77:20	affects (1) 36:21
ability (5) 108:6;168:18; 206:11;219:11;226:2	accidents (7) 122:23;126:11; 133:13;145:21; 163:10;197:15; 203:17	actors (1) 108:19	adopted (1) 34:2	affiliation (3) 14:2;36:11;178:1
able (26) 41:5,12;60:25;66:1; 85:24;102:4;109:15; 116:5;120:11;127:21; 130:2;141:13;142:11; 143:11,13,25;145:10; 149:21;150:2;156:10; 167:23;168:23; 173:13;198:9;206:7; 233:7	accompanying (1) 70:7	actual (4) 185:13;207:1; 226:10;233:25	adoption (3) 77:13,16;156:8	affluent (1) 21:22
aboard (1) 84:16	accomplish (2) 194:11;195:13	actually (43) 51:17;53:15;59:12; 65:24;85:13;89:24; 92:18;99:24;108:22; 109:9;114:17,20; 117:1,3,12;122:19; 126:1,3;129:11; 131:4;134:18,21; 137:3,14;144:8; 149:23;153:10;157:4; 158:14;161:16;164:7; 165:16,17;170:10; 176:6;185:5,8;186:4; 201:13;202:22;207:2; 232:14;238:17	ADS (1) 211:7	
abort (1) 210:15	accomplished (1) 105:6	Adam (7) 24:19;25:2,3,10;	advance (5)	
aborted (1) 210:23	According (5) 26:20;36:23;63:4; 104:23;180:11			
above (6) 19:7;31:10,20; 32:24;113:11;155:11	accordingly (1) 179:22			
absence (1) 99:9	account (2) 25:22;56:20			
absent (1) 129:21	accountability (1) 59:1			
absolutely (9) 69:2;73:3;81:12;	accounts (1) 90:23			
	accumulating (1) 64:10			

<p>afford (2) 136:16;160:21</p> <p>afternoon (5) 177:21;187:21; 198:21;214:12,15</p> <p>afterwards (1) 71:3</p> <p>ag (29) 26:24;27:13,16; 49:19;63:9;65:25; 68:14,14;116:22; 120:21;121:6;141:12; 157:20,22;166:21,23; 180:24;182:13; 193:14,24;194:3; 196:13;198:1;200:4; 206:18;216:6;219:6; 222:19;225:2</p> <p>again (44) 7:20;11:19;25:25; 45:13;56:24;64:19; 71:5,13;76:1;79:16; 90:12;92:21;94:6; 118:24;119:10; 126:20;140:8;142:19; 149:18;157:14,15; 165:22;171:18;178:9; 183:16,17;184:2; 188:13;197:23; 198:11,14;200:22; 204:4,7;205:20; 208:14;210:1;214:16, 24;218:3;219:13; 223:15;232:16,18</p> <p>against (9) 56:12;113:10,23; 134:3;194:18,25; 222:4,5;240:8</p> <p>agencies (2) 98:12;116:17</p> <p>Agency (2) 187:22;188:3</p> <p>agenda (17) 7:6,21;8:2,5;9:11; 11:5,20;12:1,4;13:10; 34:20,24;77:10;85:5, 5;243:25;244:21</p> <p>aggregate (1) 191:10</p> <p>aggregated (1) 95:20</p> <p>aggressive (2) 22:3,11</p> <p>aging (1) 157:22</p> <p>ago (15) 15:17;17:25;39:5; 60:13;62:1;63:1,9,16; 65:5;88:2;124:8; 193:2;212:13;216:25; 224:5</p> <p>agree (21) 18:24,25;30:19;</p>	<p>54:7;60:8;84:12,21; 90:4;120:23;126:23; 146:15;149:17;176:1; 211:23;218:8,17; 225:16,24;239:18; 240:8;241:13</p> <p>agreeing (2) 129:4;224:5</p> <p>agreement (3) 61:18;164:19; 226:24</p> <p>agrees (1) 152:13</p> <p>agricultural (27) 26:4;28:5,15;46:13, 15;47:4;48:19,21,23; 49:2;56:15;104:16; 105:13;106:9;107:5; 128:19;174:1,3; 197:1,5,6,16,20; 220:2,4;242:6,9</p> <p>agriculture (25) 26:18;27:7;28:10; 48:17;68:8;104:24; 107:12;117:11; 126:17;147:5;155:2, 3;158:16,18,20; 162:1;168:11;173:20; 174:4;178:22;184:17; 186:7;192:25;193:24; 194:22</p> <p>Agtonomy (3) 29:14;76:2,2</p> <p>Ah (1) 177:13</p> <p>ahead (64) 18:15,15;21:15; 25:5;29:23,23;34:11; 46:3,8;48:6;49:10; 50:4;55:6,12;60:2; 65:23;66:11;69:15; 74:23;84:6;87:22; 90:20;93:1;94:12,12; 103:24;106:7;108:1; 139:18;140:18;145:8; 148:12;150:6;166:18; 172:5,25;173:1; 174:21,21;176:10; 177:6,7,7;186:12; 188:5;192:5,18; 196:4;198:23;201:8; 214:14;215:9;218:1; 224:19,25,25;225:8; 227:20;230:9;231:21, 22,23,24;232:2</p> <p>AI (1) 106:21</p> <p>aid (1) 199:22</p> <p>ain't (1) 218:24</p> <p>air (9) 21:7;31:23;33:1;</p>	<p>47:14;50:8;159:22; 188:17,21;189:2</p> <p>airborne (3) 80:2;102:23;141:16</p> <p>air-conditioned (2) 146:23;209:8</p> <p>aircraft (14) 188:19,23;189:9, 10,17,19;190:2,3,4,7, 8,16,16,22</p> <p>airline (1) 121:12</p> <p>Airlines (1) 210:9</p> <p>airplane (2) 122:4;190:18</p> <p>airport (1) 95:11</p> <p>alarm (2) 22:5;205:22</p> <p>alarms (3) 167:16,17;205:18</p> <p>Alaska (1) 210:9</p> <p>alert (1) 166:13</p> <p>alerts (1) 94:25</p> <p>align (3) 63:24;64:2;147:25</p> <p>aligned (3) 28:9;144:8;146:19</p> <p>alignment (2) 168:14;200:2</p> <p>aligns (1) 66:18</p> <p>Allen (4) 214:9,12,15,16</p> <p>alleviate (1) 64:1</p> <p>alleviating (1) 217:3</p> <p>Alliance (1) 75:3</p> <p>Allied (1) 75:3</p> <p>all-or-none (1) 180:6</p> <p>allow (12) 49:1;77:7;145:11; 176:11,12;179:17; 182:6;198:6;206:12; 214:21;230:5;241:15</p> <p>allowed (7) 16:2,23;27:25; 92:12,20,23;207:2</p> <p>allowing (3) 36:17;61:16;195:7</p> <p>allows (8) 26:13,25;58:12; 93:4,24;153:22; 204:3;230:16</p> <p>almost (6)</p>	<p>36:15;39:13;94:16; 129:2;161:6;183:6</p> <p>alone (4) 33:1;39:3;97:8; 238:23</p> <p>along (9) 63:22;70:7;145:2,3, 3;178:22;187:2; 194:1;209:6</p> <p>alongside (1) 132:1</p> <p>alter (1) 234:23</p> <p>altering (1) 32:13</p> <p>alternate (2) 8:11;12:10</p> <p>although (3) 96:22;97:9;151:5</p> <p>Alto (3) 124:3,4,7</p> <p>always (13) 35:9;46:24;51:22; 85:11;86:23;87:18; 91:11,13,15;115:15; 169:24;177:18; 219:20</p> <p>Amalia (7) 6:18;9:23;10:5,17; 13:12,17;103:5</p> <p>amateur (1) 188:10</p> <p>Amber (5) 29:13,15;76:1,3,3</p> <p>Amen (1) 241:9</p> <p>amend (4) 62:19;101:17; 134:25;219:7</p> <p>amendment (1) 30:4</p> <p>amendments (5) 30:7;34:2;92:23; 219:1;242:7</p> <p>America (1) 132:15</p> <p>American (1) 36:24</p> <p>among (3) 34:18;62:17;105:12</p> <p>amongst (1) 16:5</p> <p>amount (10) 39:7;86:7,11;87:16; 122:18;124:19; 125:10;171:22; 185:24;220:5</p> <p>amounts (1) 60:21</p> <p>amuk (1) 63:6</p> <p>analysis (8) 32:2;86:9,25;87:7;</p>	<p>88:2,11;89:1;122:12</p> <p>analyst (5) 7:4,5;11:3,4;102:2</p> <p>analytical (1) 32:5</p> <p>AnaStacia (3) 46:1,7,11</p> <p>anchor (1) 83:12</p> <p>anchors (1) 221:18</p> <p>ancillary (1) 159:8</p> <p>Angeles (6) 6:4,9;10:8;37:5,24; 40:16</p> <p>Anne (3) 198:18,20;199:1</p> <p>announce (2) 8:14;12:13</p> <p>annual (2) 19:17;67:13</p> <p>anomalies (1) 109:19</p> <p>anonymous (2) 91:2,9</p> <p>anonymously (1) 143:24</p> <p>answered (2) 203:21,24</p> <p>answer's (1) 237:2</p> <p>anticipate (1) 102:3</p> <p>anticipated (1) 31:20</p> <p>anti-roll (1) 133:11</p> <p>anxiety (1) 63:5</p> <p>anxious (2) 42:16;244:23</p> <p>anymore (4) 37:14;150:22; 157:21;188:6</p> <p>APA (5) 92:12,21,24;93:4, 24</p> <p>apologize (1) 166:22</p> <p>Apparently (1) 48:1</p> <p>appear (1) 91:8</p> <p>appendice (1) 19:24</p> <p>appendices (2) 17:18;19:25</p> <p>applaud (2) 51:25;64:19</p> <p>apples (3) 148:1;154:22,22</p> <p>apples-to-apples (1)</p>
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154:14 applicable (1) 63:23 applicant (1) 225:11 applicants (1) 186:6 application (11) 130:13;131:23; 134:12;139:22; 156:24;157:1;183:12; 191:19,21;236:13; 237:4 applications (6) 141:20;144:18; 165:4;180:7;202:17; 206:19 Applied (8) 49:8;82:8;159:2; 169:5;179:22;192:15, 23;208:21 applies (1) 108:17 apply (5) 62:9;117:11;121:6; 179:23;180:20 applying (2) 62:7;185:12 appreciate (21) 51:23;53:15;54:25; 61:17;72:8;77:2,4; 80:13;87:18;122:1; 126:19;170:14; 174:19;176:13,14; 196:7;199:2;208:3; 218:23;219:24; 232:17 appreciated (3) 21:8;218:6;219:14 approach (6) 38:2;39:8;110:13; 118:3;184:13;219:2 approached (2) 22:8;40:23 appropriate (21) 47:6;59:7;61:9,20, 24;62:21,22;74:12; 84:17;88:22;110:16; 111:23;119:9;145:5; 148:4;153:22;186:14; 225:25;244:8,10,13 appropriately (1) 111:20 approval (4) 77:17;203:2,3,13 approve (1) 93:22 approved (3) 127:12;136:4;204:1 approving (1) 212:16 approximate (1) 131:12	approximately (2) 22:4;62:25 April (7) 34:21,24;75:16; 79:6;92:18;102:19; 245:15 arch (1) 125:20 Area (7) 18:19;21:22;42:8; 57:15;58:13;135:17; 141:6 areas (10) 31:16;68:16; 114:16,25;115:1; 144:8;145:17;193:6; 197:10;199:18 argued (1) 156:7 argument (8) 25:20;146:18; 181:19;208:13,18,21; 209:5;211:18 argumentative (1) 179:3 arguments (1) 196:24 ARI (1) 107:15 arm (1) 69:19 armed (2) 70:18;71:1 armored (1) 141:1 arms (1) 121:5 around (50) 23:1;27:6;40:20; 52:20;60:12;64:9; 90:5;108:19;110:18, 23;118:6;119:3; 122:3;124:10;126:22; 130:15;131:16;134:2; 135:3,17,21;139:22; 142:11;144:19; 145:17;146:4,9; 154:24;160:21; 164:19;166:25;167:6; 171:20;175:8;179:4; 184:14,20;186:22; 188:21;191:12; 200:21;202:19; 211:11;220:10,11; 222:23;226:3;227:12; 236:11;238:23 arranged (1) 233:21 array (1) 164:15 articulate (1) 69:5 artificial (1)	102:25 aspects (1) 70:2 assault (1) 57:19 Assembly (1) 107:8 assertion (3) 169:9,16,23 assessment (5) 31:14;67:15;91:18; 145:24;194:6 assessments (1) 31:9 assign (1) 240:25 assigned (1) 245:2 assist (1) 38:11 Assistance (1) 199:2 assistant (2) 6:23;10:22 assisting (1) 39:11 associate (2) 50:9;218:7 Associated (2) 18:19;208:9 association (12) 18:20;20:21;61:15; 66:8,17;102:22; 106:18;107:4;112:17; 178:7;214:10,17 associations (1) 75:5 assume (2) 99:10;165:23 assuming (2) 82:13;132:13 assumptions (1) 144:11 assure (1) 193:12 attached (2) 139:17;140:9 attacked (2) 38:19;73:22 attacks (2) 109:1;142:13 attainable (1) 145:25 attempt (1) 227:8 attend (6) 42:14;72:16; 112:19;141:14;240:3; 245:20 attendance (1) 245:19 attendees (1) 34:13	attending (5) 6:12;8:16;10:11; 12:15;225:2 attention (4) 15:18;101:12; 167:10;176:15 attorney (3) 50:23;102:2,10 attracting (1) 147:11 attractive (1) 186:5 audience (1) 103:22 audio (3) 7:10;11:9;27:9 audits (1) 163:8 augmentation (1) 109:14 Australia (4) 106:2;132:16; 140:20;155:5 authentication (1) 109:10 author (1) 34:14 authorities (1) 238:18 authority (5) 234:5,7;240:13; 241:12,14 automated (15) 8:9;12:8;46:13; 104:16;108:6;114:14; 115:11;122:11; 123:17;175:8;180:5; 191:5;199:5;211:1; 217:1 automatic (4) 190:2,5,12,14 automatically (1) 80:21 Automation (5) 107:14;151:5; 199:12;209:12; 243:24 automobiles (2) 121:3,24 autonomous (93) 25:7,17,21;26:8,13; 27:24;28:9,13,20; 46:14;47:4;48:13,19, 23;49:2,19;51:24; 56:13;61:21,22;62:7, 25;63:19,22;68:8,14; 74:11;81:9;105:15, 24;106:9;111:1,9; 116:18,21,25;117:10, 15;126:23;130:8; 131:15;133:22; 135:10,11;136:4,21; 139:14;140:1,20;	141:15,19,24;148:2, 22;156:13;162:25; 163:17;164:20; 166:20,25;167:9,14, 14;168:5,20,23; 178:16,20;179:20; 180:1;181:17,22; 184:4;190:24;193:24; 194:22;197:5;199:13; 202:4;203:7,15; 204:3;207:9,13; 208:2,10;214:19; 220:4;228:14;229:8; 236:4,11;242:9 autonomously (4) 132:2;144:19; 191:23;236:17 autonomy (16) 108:24;124:23; 125:19;146:21; 178:24;180:3,6; 182:15;183:15; 184:15,22,24;185:11, 19;186:2;207:15 autopilot (2) 199:25;210:22 autopilot's (1) 121:16 Autumn (6) 6:21;10:20;101:10, 21;242:22;245:11 available (8) 63:17;132:17; 145:24;153:2;161:18, 22;182:3;219:9 avalanche (1) 245:1 avenue (2) 216:2;218:20 avenues (2) 14:19;15:10 average (4) 20:11,16;61:6; 157:22 aviation (3) 188:10,10;210:8 aviators (2) 190:1,9 avoid (2) 150:21;210:25 avoidance (4) 128:19;138:5,6; 173:18 awarded (1) 196:12 aware (7) 10:3;30:16;32:4; 49:15,17;89:5;132:18 away (12) 20:23;23:2;41:5,8; 93:15;124:24;137:9; 186:24;188:2;213:9, 13,24
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Aye (11) 78:8,10,12,14,16, 20,20,22;243:3,7,9	bathroom (2) 168:4,6 Bay (1) 18:19 bear (7) 37:18;81:4;106:12, 20,21;108:15;147:20 beat (1) 171:19 became (1) 30:25 become (3) 39:7;95:20;160:25 becomes (1) 89:25 becoming (2) 33:21;43:16 beer (1) 70:23 began (2) 62:25;65:5 begin (7) 13:21;65:4;82:12, 16;94:25;153:10; 238:25 beginning (2) 52:6;108:4 begins (3) 8:10;12:9;204:11 begun (2) 62:1;152:21 behalf (2) 112:18;187:15 behavior (1) 57:23 behaviors (2) 112:3;205:16 behind (10) 86:12;122:13; 135:12;136:2;157:24; 190:13;197:2;200:19; 211:18,21 belief (1) 186:3 believing (1) 116:7 belittling (1) 44:18 below (1) 182:8 belt (1) 22:17 benchmarking (1) 149:1 benchmarks (1) 61:20 beneficial (1) 152:17 benefit (5) 28:10;48:21;157:2; 185:15;216:13 benefits (9) 69:25;108:5;	124:22;126:22;127:2; 146:21;198:10; 206:22;207:18 Berg (36) 6:24;10:23;78:24; 79:1;81:1;82:22;83:6, 10,17,20,22;86:6,25; 91:11,20;95:23; 96:13,16;97:16; 98:11,17,19;99:14; 100:5,15,23;126:6; 227:3;228:3;234:16; 235:9,18;236:1; 237:7,12,14 besides (1) 33:21 best (19) 47:2;57:1;58:18,20; 61:23;71:25;86:16; 110:18;111:8;149:11, 13;159:25;164:18,20; 195:13;211:12,13,21; 221:15 better (16) 24:6;42:6,9;52:5; 69:25;74:5;150:21, 21,24;151:7;170:7; 171:1,11;196:13; 211:2;217:16 Beverly (1) 21:21 bewildering (1) 63:5 beyond (4) 23:14;56:21; 113:11;155:11 bias (1) 150:11 big (6) 51:2;87:6;88:13; 123:20;158:19,24 bigger (3) 218:15;236:10,12 biggest (1) 159:23 bill (4) 15:13;16:2,12; 101:13 billion (2) 27:17;105:1 binary (1) 207:12 biodiversity (1) 105:9 bit (29) 18:2,22;21:8;42:14; 62:24;73:18;85:13; 101:23;103:4;118:6; 124:4;126:7;127:25; 129:12;140:8;158:15; 161:16;170:18;179:2, 5;185:15;196:23; 222:20;225:8;230:11;	232:20;239:7,9,13 Black (1) 188:18 blades (2) 117:4,7 blanche (1) 148:7 block (2) 29:24,25 blood (5) 19:13;30:18;31:17; 47:12;61:6 blotch (1) 157:9 blow (1) 23:2 Blue (1) 121:13 Bluetooth (1) 185:1 Bluewhite (4) 24:20;25:2,11; 141:17 Board (158) 6:4,7,9,12;8:15,19, 23;9:5,7,15,17,21,25; 10:8,11;12:14,18,22; 13:4,6,24;18:17,18; 21:5;24:10;25:9;28:4, 18;30:1,16;33:5,25; 34:13,18;35:23;36:2, 5,13;40:13;43:14; 44:4;45:16;46:10; 51:25;52:2,11;55:14; 56:7,24;60:7;64:19; 65:4;66:13;71:13; 72:8,13;73:4;75:1,16; 77:7,12,14,16;78:2, 25;79:2,8,17;80:7,9; 81:2;83:4,23;89:5,9; 90:18;92:14,17; 93:17,21;102:20; 103:3,8,23;104:3; 107:25;112:2;119:22; 120:8;128:23;132:19; 133:10;134:9;135:8; 141:4,5;144:24; 152:25;153:15,18; 163:6;164:21;165:2; 174:16;175:1,5,17; 176:14;178:10; 180:13;183:1;187:4, 21;188:3;192:20; 196:6;198:11,12,25; 201:21;204:4;206:21, 23;208:1,16;212:3,11, 15;213:16;214:4,13; 218:3,9;219:21; 222:9,12,16,18;224:7, 16;225:16;226:11; 232:10,17,19;234:9; 235:5;236:25;237:3; 240:14,18;241:3;	242:4;244:8,19,21; 245:8,14 Boards (1) 79:9 Board's (4) 9:18;103:1,6,10 bodies (2) 105:10;147:6 body (7) 63:8;72:19;124:20; 158:13;195:1;226:4, 10 books (2) 94:19,22 bore (1) 212:22 bored (1) 171:13 both (23) 7:10;11:9;22:21; 23:1;32:12;35:23; 74:5;84:25;89:8; 94:18;95:3;103:3; 108:8;121:4;142:2; 144:1,4;149:18; 173:8;196:20;218:25; 223:22;236:20 bother (1) 169:19 bottle (1) 22:14 bottles (5) 22:9,10,13,16; 37:11 bottom (1) 47:2 bottom-line (1) 60:24 bounces (1) 164:8 bounds (1) 154:1 boxes (1) 217:2 brakes (1) 165:13 braking (2) 202:14;203:9 branch (2) 91:21;100:17 branches (1) 200:2 Brandon (1) 14:14 breadth (2) 111:6;139:11 break (9) 29:23;64:11;101:7; 104:12;163:19;168:6; 172:4;176:11;177:20 breaks (4) 125:14;146:7; 168:4;176:11
--	---	---	---	--

<p>bridge (4) 97:15;98:9,16,16</p> <p>brief (6) 51:16;77:14;78:25; 101:10;214:15;218:4</p> <p>briefing (1) 79:3</p> <p>briefings (1) 77:8</p> <p>briefly (4) 68:6;101:11;143:4; 144:6</p> <p>bring (21) 28:13;83:6,17; 100:16,16;106:4; 110:4;142:17;159:11; 160:5;161:21;162:17; 166:16;172:5;206:23; 219:12;220:14; 221:10;224:11; 232:10;237:22</p> <p>bringing (5) 27:21;88:12; 158:25;162:4;181:11</p> <p>brings (1) 103:8</p> <p>bro (1) 224:24</p> <p>broad (4) 83:15;164:19; 208:25;236:12</p> <p>broadcast (2) 7:9;11:8</p> <p>broadcasts (2) 7:11;11:10</p> <p>broader (1) 238:24</p> <p>broadly (1) 108:16</p> <p>broke (1) 97:18</p> <p>broken (1) 119:11</p> <p>brought (4) 47:5;178:18,23; 194:1</p> <p>Bruce (12) 14:4;15:18,18;16:8, 15;18:8,22;21:2,6; 50:10;75:9;84:12</p> <p>bruised (1) 189:15</p> <p>Bryan (2) 187:18;210:8</p> <p>build (5) 164:22;166:6; 167:5;193:17;196:13</p> <p>building (1) 60:21</p> <p>built (2) 60:24;109:23</p> <p>bullet (1) 41:2</p>	<p>bulletproof (2) 120:14,17</p> <p>bunch (2) 113:7;212:5</p> <p>burden (2) 30:18;223:11</p> <p>burdensome (1) 31:23</p> <p>Bureau (4) 95:23;96:4;184:16; 187:19</p> <p>Burgel (9) 6:13;10:12;78:7,8; 90:19,21;91:16,22; 242:24</p> <p>burn (1) 185:25</p> <p>burning (1) 185:24</p> <p>Burro (2) 217:1,1</p> <p>business (18) 8:1;9:10,11;11:25; 13:9,10;25:10;28:1; 40:14;52:14;54:8; 73:10;77:6,7,9,11; 244:16;245:20</p> <p>businesses (3) 33:2;54:22;197:23</p> <p>busy (1) 23:22</p> <p>buy (1) 34:17</p> <p>bygone (1) 73:15</p>	<p>186:24;201:15,21; 203:2,4,13;204:1; 213:3</p> <p>Cal/OSHA's (2) 203:19,25</p> <p>calculated (1) 20:16</p> <p>California (70) 6:4;14:4,11;15:20; 26:10,11,15;27:18; 28:20;32:14;33:3; 34:14,17;43:21;44:8; 47:5,8;48:15,16,22; 49:3,25;55:17;60:13; 64:4,5;66:8,16;69:1; 72:5;75:3,4;105:1,17; 107:1,4,8,10,15; 112:16;124:2,19; 125:7;126:17;132:13; 135:14;139:2;142:17; 157:19,23;158:1; 173:19;174:4;185:7; 186:6;187:18;191:10; 194:24;195:20;197:1, 22;199:1;207:23; 215:4,12,14;216:1; 221:16;230:15; 242:10</p> <p>California-based (1) 145:10</p> <p>California's (4) 26:19;63:24; 135:13;155:2</p> <p>call (18) 37:11;38:23,25; 41:3;43:13;60:17; 78:1;91:2;110:4; 119:11;146:20; 153:11;171:15; 196:17,22;237:21; 240:4;242:22</p> <p>called (14) 6:7;7:17,18;11:16, 17;23:12;24:17;41:7; 44:23;74:18;111:16; 164:7;215:5;244:25</p> <p>caller (3) 34:9;74:23;195:21</p> <p>callers (3) 192:13;201:1; 217:23</p> <p>calling (3) 8:8;12:7;237:18</p> <p>calls (2) 45:25;203:18</p> <p>came (12) 15:18,19;27:22; 72:15;89:20;90:13; 125:6;127:8;168:5; 178:12;179:6;182:18</p> <p>camera (2) 34:4;224:22</p> <p>cameras (6) 56:21;164:3,4; 168:14;170:21;171:2</p>	<p>can (279) 7:11;8:5;11:10; 12:4;14:22,25;15:1; 16:3;17:19,22;20:22, 23;24:5,12,25;3,4; 28:11,21;29:5,15,19, 20,20;30:20;32:5; 34:9,10,10,23;36:3; 38:2,17;47:25;48:5; 49:14,23;50:1,3,3,5; 51:8,11;53:7,7;54:11, 15,20,20;58:8;59:12, 12,13;60:20;61:24; 63:11,12,14,21;64:14; 65:4,16,21,22,22,23; 66:9,10,10;69:12,13, 13;72:6,19;73:1,17; 74:5,17;75:23;76:3,8, 14;78:1,2;82:1,8,14; 84:16;85:13;86:16; 88:3;89:11;91:14; 92:19;94:21;95:16; 96:25;97:3,13,14,23; 98:9,24;101:9,10; 103:17,22;104:3,4,5, 6,19;105:16;108:7, 10;109:2,8,21,21,22; 110:10,23;111:13,19, 19,23;112:12;113:4; 116:11;117:2;118:12; 119:14,15;121:13,14; 122:20;124:16; 125:24;127:2;128:12; 130:24;131:3;132:24; 133:24;135:2;136:24; 137:3,8,17;139:9,16; 140:3,9;142:1; 143:20,22,22,23; 145:7;146:8;149:12, 15;151:10,11,11,11, 20;152:2,3,8,14; 153:4,6,10,14,15,17; 157:4,5,6,6;159:3; 160:22;161:24,25; 162:11;163:19,23; 164:16,22;167:9; 170:24;172:19; 173:12;177:13;178:5, 20;179:18;180:20; 181:13;182:4,22; 183:10,11,13;184:6; 185:2,17,18;188:4; 190:25;191:15;192:9, 16,17;194:18;195:4, 24;196:2,3;198:20, 21;199:12;200:1; 201:5,6,6,21;203:2; 205:15;206:25;207:7, 9,10,16;208:21; 210:3;211:6,12; 214:13;215:6,7,7,19,</p>	<p>20,24;216:12,15; 217:14;218:16,22; 220:15;221:15;222:1, 19;224:12;227:15; 230:8,18;231:8,9,9; 232:21,22;233:1,16, 21,22;234:3;235:21; 237:23;238:6,24; 239:20,21;240:10; 241:2,10;242:22; 244:12</p> <p>Canada (1) 98:4</p> <p>cancer (1) 185:7</p> <p>cap (1) 97:4</p> <p>capability (1) 27:21</p> <p>capable (1) 25:17</p> <p>capacities (2) 120:9;193:23</p> <p>capacity (4) 25:12;87:2;189:21; 220:2</p> <p>capital (2) 197:21;209:19</p> <p>capture (3) 150:2;155:19; 217:17</p> <p>captured (2) 149:24;155:20</p> <p>car (7) 22:21;23:3;117:5; 124:7;150:16,18; 164:10</p> <p>care (2) 162:15;169:19</p> <p>career (5) 35:19;147:19; 193:8,10</p> <p>careful (2) 205:25;212:1</p> <p>carefully (3) 9:20;61:4;200:23</p> <p>cares (1) 241:19</p> <p>Carl (1) 189:6</p> <p>carrier (5) 189:9,10;190:7,8, 16</p> <p>carriers (2) 190:2,4</p> <p>carries (1) 217:2</p> <p>carrot (1) 125:21</p> <p>carrying (2) 130:20;199:17</p> <p>cars (5) 44:24;123:7;</p>
C				
<p>C&H (1) 192:24</p> <p>cab (1) 25:21</p> <p>cabinet (1) 22:7</p> <p>Cafiero (19) 106:19;108:4,10, 12;117:23;120:4,22; 123:22;144:4;146:12; 149:11;162:7,13; 165:21;166:18; 170:12;172:13; 174:22,25</p> <p>Cal (1) 158:17</p> <p>Cal/OSHA (37) 6:25;10:24;14:14; 15:5;16:2,13;28:25; 33:5;39:14,16;40:3; 45:16;57:10;58:24; 63:12;79:21;80:8; 91:1,3,10,18,21;97:6; 99:8,10;100:7;103:9; 107:21;143:11;</p>				

<p>124:11,14;135:11 Carson (1) 45:1 cart (6) 106:13;115:6; 136:10;140:17; 216:24;225:7 carte (1) 148:6 cartridges (1) 191:25 cart-sized (1) 105:23 carve-out (1) 207:4 case (16) 22:9;40:21;58:13, 21,21;84:9;97:18; 99:12,14;131:16; 165:11,11;190:11; 211:3;213:12;229:5 cases (8) 58:9;121:7;165:12; 171:8,8;191:5,15; 211:25 cash (1) 40:25 cashiers (2) 41:11,13 catastrophic (1) 109:4 catch (1) 95:11 categories (3) 163:3,18,25 category (3) 163:22;164:6;165:5 Katten (4) 198:18,21,24;199:1 caught (3) 50:22;51:12;171:9 cause (40) 16:17;17:23;29:7; 36:25;40:1;45:9; 53:17;54:3;89:18; 90:14;91:13;95:9; 96:2;104:5;113:18; 114:11;116:23; 118:19;122:9;123:9; 125:9;132:7;136:17; 146:16;148:3,21,22; 150:3,21,24;151:2; 155:25;158:8;182:16; 185:7;192:7;224:22; 230:6;231:19;233:7 caused (1) 52:20 causes (3) 73:19;88:8;222:10 cautiously (1) 46:25 CDFA (1) 26:16</p>	<p>CDPH (2) 79:22;80:20 Ceiling (1) 75:2 cell (1) 114:24 center (3) 69:1;109:18;159:10 centered (1) 220:9 Central (7) 26:19;48:15,21; 69:6;125:12;196:12; 200:4 cents (1) 229:21 century (1) 124:7 CEO (1) 106:20 certain (4) 46:15;148:5; 171:12;194:21 certainly (9) 53:6,21;55:2; 110:25;111:8;118:15; 119:9;125:20,22 60:4 certified (1) 60:4 cetera (8) 46:22;68:18;90:10; 100:9;125:3;126:18; 222:24;240:5 CHAIR (224) 6:3;9:7;13:6,12; 14:3;18:13;21:13; 24:15,22,25;25:3,5,9; 27:8,11;29:1,5,15,19, 22;30:1;34:5,9,11; 36:8;40:9;44:1,3; 45:23;46:3,6,8;47:21, 25;48:6;49:5,10,22; 50:1,2,4;55:4,8,11; 57:3;59:16,23,25; 61:13;65:10,16,21,23; 66:2,5,9,11;67:24; 68:3;69:8,12,15;72:2, 6,7;74:14,20,23,25; 75:1,19,23;76:3,8,10, 14,18;77:15,19,22,24; 78:6,22;80:25;83:21; 84:3,5;86:18,20,23; 87:8,24;88:6;90:17, 20;91:23;92:8,25; 94:2,4,7,9,12;98:20; 101:1,6,8,20,22; 103:12,21;104:4,9,13, 22;108:11;114:8,11; 119:24;122:8;123:22; 132:8;135:6;141:2; 143:2;145:8,15; 146:12;150:12; 155:24;160:10;</p>	<p>162:11;172:20,23,25; 174:15,17,20,24; 175:2;176:5,17,19,22; 177:5,7,10,18,21; 183:24;186:11; 187:16;192:12,16,18, 19;195:17,21;196:2, 4;198:16,20,23,25; 200:25;201:5,8; 207:20,24,25;214:7, 11,12,14,25;215:6,9; 217:20,22;218:1,2; 219:15,20;224:15,19, 24;226:14,17;228:8, 10;229:6,12,19; 230:9;231:4,22; 232:1,24;233:3,9,13, 18;234:12;235:4,17, 25;236:2,24;237:11, 13;241:5,10,13,22; 242:12,15,20,22,25; 243:13,14;244:17; 245:8,13 CHAIREZ (2) 44:3,4 Chairman (7) 6:8;10:7;18:16; 61:16;78:21;180:11; 187:21 Challenge (2) 196:11,13 challenges (1) 195:4 challenging (1) 87:1 Chamber (3) 49:25;59:4;68:2 champions (1) 172:18 chance (7) 25:15;113:12; 130:18;144:14; 170:14;174:25;186:8 change (11) 30:24;31:16;39:17; 43:10;51:2,5,9,10; 88:4;126:22;170:6; 216:7,8 changed (9) 51:7,12;80:20,21; 134:22;159:11; 212:18;213:18;214:3 change-related (1) 125:8 changes (15) 17:17,18;19:3; 45:12;50:23;51:3; 54:17;79:23;93:8,11, 13;151:18;229:15,17; 242:9 changing (2) 17:2;30:25 channel (1)</p>	<p>197:25 characterize (1) 112:3 charge (1) 175:4 check (1) 100:18 checkstand (1) 22:11 cheek (1) 124:9 chemical (4) 26:5;28:17;68:18; 199:12 chemicals (7) 64:3;124:25; 146:25;185:6,13; 197:17;236:5 chief (6) 6:21,24;10:20,23; 83:7;92:3 children (2) 42:19;216:9 chilling (1) 208:18 choice (2) 220:14;244:2 choose (2) 161:24;165:24 choosing (1) 35:9 Chris (13) 6:11;10:10;65:19, 21;81:2;83:21;151:8; 195:25;196:2;220:21; 222:1;240:7;242:1 Chris' (2) 154:5;232:4 Chris's (1) 149:16 Christie (1) 21:17 Christina (18) 6:18;10:17;49:16; 92:8;101:21;103:12, 20;126:3;128:9; 152:10,20,25;153:6; 155:13;177:3;180:17; 182:19;241:7 Christina's (1) 238:17 Christopher (2) 45:5;74:21 circle (1) 215:3 circling (1) 75:21 circumstances (3) 99:18;148:2,5 citation (1) 19:21 citations (1) 16:13</p>	<p>cite (2) 99:11,16 cited (2) 99:25;100:2 cities (1) 33:16 City (6) 47:24;48:3,11;76:6; 98:7;124:5 claim (2) 156:10;200:11 clarification (5) 132:5;137:23; 148:21;155:14; 238:17 clarify (6) 75:14;82:2;153:6; 219:23;226:23; 240:10 clarifying (1) 233:1 clarity (3) 51:6;74:4;202:23 clear (19) 30:17;50:25;51:6; 54:16,21;57:14; 58:25;66:23;84:17; 161:15;166:8,22; 190:11;200:7;204:12; 207:17;214:20; 224:21;228:21 clearly (5) 8:23;12:22;52:12; 143:8;220:1 Cleary (5) 29:17,20,24;30:2; 75:9 Cleary's (1) 50:10 clicking (2) 8:6;12:5 climate (2) 125:8;126:22 climate-smart (1) 198:1 close (12) 43:6;52:3;60:17; 61:6,10;113:2;120:4; 123:23;135:24; 147:12;202:20; 203:18 closed (3) 77:5;219:18;245:10 closed-loop (1) 110:13 closely (5) 118:1;158:16; 172:13,16;173:5 closer (1) 163:16 closing (1) 172:22 clothes (1)</p>
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144:21 Cloud (1) 108:7 clusters (1) 58:11 CNA (1) 66:18 Co (1) 34:8 CO2 (1) 186:1 Coalition (1) 55:17 code (2) 20:4;234:5 cognizant (2) 136:25;155:5 collaborative (1) 166:1 collaboratively (1) 219:4 collapsed (1) 115:24 collateral (1) 105:6 colleagues (5) 16:15;46:11;47:7; 53:25;205:15 collect (4) 119:4;225:13,17; 239:21 collected (4) 142:6;149:8; 184:11;223:21 collecting (4) 128:17;142:15; 194:10,22 collection (1) 134:13 college (3) 70:17;107:9;158:21 colleges (1) 27:3 collision (2) 27:24;138:6 collision-avoidance (3) 203:8,17,21 collisions (1) 199:24 coma (1) 185:10 combination (1) 164:18 combine (1) 109:3 combined (2) 134:16;211:12 combining (1) 245:3 comfortable (2) 56:23;135:1 coming (13) 56:1;64:17;68:20;	80:12;98:9;157:3,24; 172:14;192:9;198:7; 205:20;209:1;223:9 commenced (1) 119:20 comment (85) 7:23;8:2,5,6,9,10; 9:2,3,16;10:3;11:22; 12:1,4,5,8,9;13:1,2, 20;14:5;17:16,20,22; 18:25;21:11;47:19; 49:7,12,18;50:18; 53:15;55:22;66:15; 67:23;75:13;76:19; 77:10;79:6,15;82:7; 83:3,5,15;92:2,16,19; 93:3,5,6,24;96:19; 97:12;98:22;99:5,13; 100:6;104:18;112:12; 119:25;120:15;122:9; 126:8;129:15;149:1, 16;152:8;155:13; 160:7,11;173:3; 176:2,21;177:17; 186:15;201:10; 219:18;221:23; 224:15;225:16;231:1, 2;235:5;237:16; 239:5;242:16 commented (1) 64:24 commenter (1) 21:14 commenters (17) 6:20;8:13,16,22; 9:22;10:2,19;12:12, 15,21;36:9;49:13,17; 137:17;177:24; 217:25;219:16 commenting (4) 8:24;9:1;12:23,25 comments (60) 8:15;9:17;12:14; 30:13;35:23;50:9,11; 55:15;60:8,8;61:19; 62:3;63:7;66:19;68:5; 72:12;74:10;75:8,16; 77:1,3;79:10;80:13; 81:4,6,7;82:5,19;84:2, 10,12;85:10;86:2; 93:10;110:22;117:24; 119:17,23;120:12; 160:13;161:12; 166:19,23;174:15,23; 175:3;176:7;182:7; 183:8,25;187:17; 204:17;210:8;218:8; 219:24;224:18;229:1; 230:18;232:25; 241:13 Commerce (3) 49:25;59:4;68:2 Commercial (4)	57:6;69:18;121:12; 210:9 commitment (1) 196:22 committee (94) 15:16;17:8,13,23; 19:1;21:11;28:11,19; 33:13;61:24;62:16, 19,21,23;64:22,24,25; 65:4;75:14;81:16,21; 82:19;92:4,6,96:16; 102:16,18;110:20; 112:3;118:18;119:12, 19,19;150:9;152:6,9, 18,24;153:9,21; 155:12;180:15,18; 182:21;183:18,19,21; 186:18,20;187:8,13; 188:2;192:5,6;195:2, 13,16;196:25;198:13; 208:6;212:17;213:23; 214:23;219:11; 220:19,22;221:5,14, 24;223:2,11;224:8; 225:6,25;230:4,13,24; 231:6,7;232:5,14; 233:17,18,20;237:18; 238:2;239:23;240:4, 5,11;241:1;242:5,8; 244:7 committees (11) 17:9;82:23;88:24; 92:11,13;153:12,13; 155:7;193:19;220:24; 242:7 common (6) 68:20;84:24;96:10; 171:24;193:12; 200:14 communicate (1) 33:7 communicating (1) 244:5 communication (3) 33:16;98:12;170:4 communications (1) 30:6 communities (6) 28:5,15;96:24;97:7; 115:4;173:8 community (7) 27:3;34:19;44:11; 52:14;54:9;89:12; 219:6 community-based (2) 173:10;196:18 companies (6) 27:14;110:3; 116:18;145:1;162:13; 209:20 companion (1) 97:6 company (17)	14:24;23:13,18; 24:3,6;38:1,4;41:20, 24;42:12;43:2; 108:14;144:25; 151:19;184:3;193:1; 213:10 compare (4) 121:22;184:19; 194:15,24 compared (3) 33:18;122:4;194:18 comparison (2) 154:15;179:1 comparisons (1) 154:22 compiled (1) 104:23 complain (1) 14:22 complaint (3) 91:12;99:7,15 complaints (3) 91:2,9;154:17 complete (4) 31:14;144:13; 205:3;234:7 completed (8) 8:13;12:12;80:4; 201:23,25;203:12; 204:7,10 completely (12) 18:24,25;20:6; 84:12;85:25;89:4; 146:15,19;149:17; 161:10;171:3;241:14 completion (1) 128:4 complex (2) 147:18;221:8 complexity (1) 83:1 compliance (3) 50:15;153:17;193:6 complicated (8) 30:25;35:21;52:3, 10;84:14;119:2; 199:21;222:13 comply (2) 14:23;62:14 component (1) 136:8 components (6) 71:15;163:18,19, 20;203:10;206:13 comprehensive (2) 67:3;96:1 compromise (1) 181:14 compute (1) 165:1 computer (8) 8:25;12:24;23:18; 63:3;147:16;151:17;	161:3,4 computers (7) 7:16;11:15;63:4,5; 110:8;111:10;171:11 computer's (1) 165:1 computer-vision (1) 164:3 Con (1) 63:9 concentrate (2) 174:5;181:23 concept (1) 20:11 concepts (1) 111:15 concern (23) 26:1,2;30:22;31:25; 51:9;85:1;108:19; 110:23;114:5,18; 115:19;116:1,15; 122:3,6,9;126:21; 171:20,20;200:9; 220:18;232:4;239:25 concerned (3) 30:7;110:22;165:7 concerning (9) 13:21;135:18; 136:3,9;178:19; 209:25;212:10;213:2, 20 concerns (34) 30:11,15;33:7,15, 23;34:1;46:13,19,19; 47:7;75:8;90:22; 114:13;118:1,6; 127:11,23;142:24; 144:15;145:13;151:1, 2;154:19;168:13; 170:13,18;172:11; 178:18;186:19; 187:14;200:3;224:4; 237:23;239:14 concluded (2) 9:9;13:8 conclusion (2) 65:2;209:2 condition (5) 131:19;185:22; 228:18,20;229:12 conditions (19) 56:18,23;91:4; 125:18;126:13; 127:23;129:3;131:10; 137:24;170:25; 212:23;227:3;228:1, 6,24;229:4,15;230:2; 231:15 conducted (9) 92:11;102:1,14; 107:21;119:21; 129:20;130:1;221:4; 240:12
---	---	--	---	--

<p>conducting (1) 228:13</p> <p>conference (11) 8:4,16,17,24;12:3, 15,16,23;27:15; 59:11;245:16</p> <p>confidence (1) 119:8</p> <p>confidently (1) 143:23</p> <p>conflating (2) 118:9;153:8</p> <p>confront (2) 23:20;38:7</p> <p>confronting (1) 37:25</p> <p>confusing (3) 20:2,6;138:20</p> <p>conjunction (1) 173:24</p> <p>connected (5) 50:22;111:19; 116:13;120:24,24</p> <p>connection (1) 167:20</p> <p>connectivity (10) 108:6,21;111:7,11, 21;114:1,3,14; 178:14;194:4</p> <p>consensus (2) 16:5;182:23</p> <p>consequence (2) 109:2;116:13</p> <p>consequences (1) 58:6</p> <p>consider (10) 30:10;32:8,17;83:8; 92:18;93:9;112:2; 195:1;242:7,8</p> <p>considerable (1) 125:10</p> <p>consideration (5) 32:11;56:25; 195:16;216:14; 242:10</p> <p>considerations (1) 198:8</p> <p>considered (3) 51:19;128:4;147:5</p> <p>considering (3) 46:25;50:13;198:12</p> <p>consisted (1) 23:18</p> <p>consistence (1) 33:24</p> <p>consistency (1) 51:23</p> <p>consistent (1) 201:25</p> <p>consists (2) 7:22;11:21</p> <p>consortium (1) 95:15</p>	<p>constant (3) 23:23;35:9;170:4</p> <p>constantly (1) 206:8</p> <p>construction (8) 17:15;18:24;19:5; 30:5,8;32:12;60:22; 102:16</p> <p>consultant (4) 7:3;11:2;34:8,14</p> <p>consumer (1) 20:15</p> <p>contacted (1) 142:24</p> <p>context (2) 85:14;222:7</p> <p>contexts (1) 125:6</p> <p>continue (18) 39:18;45:9;55:5; 58:1;90:14;101:3; 109:23;111:23; 129:17;130:6;153:4; 160:23;168:19;200:2; 205:9;211:8;225:17; 232:22</p> <p>continued (1) 28:24</p> <p>continues (2) 101:25;131:7</p> <p>continuing (4) 187:5,6;201:20; 223:5</p> <p>continuously (1) 184:24</p> <p>contract (1) 129:2</p> <p>Contractors (7) 14:4;18:19;20:8,22; 74:22;75:2,4</p> <p>contribute (1) 173:12</p> <p>contributes (1) 19:22</p> <p>contributing (1) 93:19</p> <p>contributions (1) 196:8</p> <p>control (9) 19:12;79:23; 102:23;107:14; 109:12;164:11; 194:19,20;209:16</p> <p>controls (6) 19:10,11;30:24; 62:13;133:1;134:17</p> <p>convene (4) 62:18;65:4;153:14; 242:4</p> <p>convening (2) 75:13;199:7</p> <p>conversation (24) 25:16;28:13;</p>	<p>123:23,25;133:25; 134:24;138:21;139:4; 142:25;144:18;145:2; 152:13;162:17; 165:18;169:2;173:13; 184:13;187:24; 197:14;218:18; 219:12;222:20; 233:25;237:22</p> <p>conversations (2) 164:17;173:14</p> <p>conveyor (1) 22:17</p> <p>convinced (1) 199:3</p> <p>cooperation (1) 28:25</p> <p>coordinator (1) 69:20</p> <p>coordinators (2) 14:10,24</p> <p>Copies (2) 7:6;11:5</p> <p>core (2) 54:10,16</p> <p>corner (2) 161:7,10</p> <p>corollaries (1) 117:9</p> <p>Corporation (4) 26:22;65:20;196:1, 9</p> <p>corporations (1) 116:16</p> <p>corrective (2) 185:3,21</p> <p>correctly (6) 25:16;50:11;130:4; 153:7;191:24;192:1</p> <p>cost (9) 20:24;86:24;87:15, 21;105:17;123:14; 158:1;168:19;188:24</p> <p>cost-benefit (1) 122:11</p> <p>costly (1) 45:8</p> <p>costs (1) 20:15</p> <p>Council (1) 106:25</p> <p>councils (1) 98:7</p> <p>counsel (3) 6:22;10:21;92:20</p> <p>counseling (2) 42:11,13</p> <p>Counties (2) 18:20;33:16</p> <p>countless (1) 190:21</p> <p>countries (3) 64:9;140:21;197:3</p>	<p>country (1) 189:21</p> <p>country's (1) 105:2</p> <p>counts (1) 26:10</p> <p>County (6) 26:21;57:7,7;65:20; 196:1,9</p> <p>couple (16) 68:5;80:20;84:10; 85:9;92:1;109:7; 142:3;147:23;169:6; 176:6;178:12;188:8, 11,12,13;216:25</p> <p>course (9) 41:15;67:4;84:11; 89:4;91:5;126:19; 168:7;179:3;184:8</p> <p>courses (3) 41:25,25;42:3</p> <p>cover (2) 16:6;18:7</p> <p>coverage (1) 38:15</p> <p>covered (4) 50:12;91:5;96:6; 208:9</p> <p>covering (2) 16:3;64:8</p> <p>covers (2) 18:10;57:6</p> <p>COVID (4) 45:9;58:9;80:2; 82:5</p> <p>COVID-19 (2) 80:1,19</p> <p>coworker (3) 22:10,17;41:2</p> <p>coworkers (6) 21:23;23:4;41:17; 43:18;44:18;45:19</p> <p>coworker's (1) 41:4</p> <p>craft (1) 14:11</p> <p>crap (1) 76:23</p> <p>crash (1) 124:7</p> <p>crashes (1) 210:17</p> <p>crates (1) 125:3</p> <p>Crawford (13) 6:10;10:9;78:9,10; 91:25;93:2;94:1; 233:1,4,17;234:1; 243:2,3</p> <p>create (12) 53:8;58:25;68:19; 69:24;81:17;110:17; 119:15;144:22;</p>	<p>217:18;218:20; 223:13;232:20</p> <p>created (4) 54:17;161:22; 209:14;217:6</p> <p>creates (2) 115:22;196:14</p> <p>creating (6) 134:21;152:16; 161:20;162:10; 169:12;205:25</p> <p>creation (2) 26:18;214:22</p> <p>credit (1) 130:7</p> <p>crew (3) 20:17;130:20; 189:17</p> <p>crime (1) 38:4</p> <p>crimes (1) 37:2</p> <p>criminal (11) 52:16,20;53:11,24; 54:1,5,10,16;55:1; 90:5,5</p> <p>criminal-justice (2) 59:4;66:25</p> <p>criminals (1) 52:22</p> <p>criteria (1) 225:18</p> <p>critical (15) 48:20;57:14;81:12; 84:13;97:16;111:10; 112:21;155:1;187:9, 10;194:17;195:9; 214:21;217:11; 223:11</p> <p>CRLA (2) 47:8;198:19</p> <p>crop (3) 132:17;202:18; 207:14</p> <p>crops (2) 125:1;181:24</p> <p>crucial (4) 68:7;69:5;71:20; 109:3</p> <p>cruise (1) 164:11</p> <p>crushed (2) 173:21,21</p> <p>CSU (1) 107:15</p> <p>cubic (2) 31:23;32:25</p> <p>current (11) 31:7;60:5,16,18; 62:7;69:22;154:4; 156:9;201:24;204:19; 206:2</p> <p>currently (12)</p>
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<p>21:20;38:21;40:15; 63:20;64:7;101:17; 107:13;179:1,17; 182:5;199:10;245:3 customer (2) 40:22;57:23 customers (9) 21:25;23:23;24:2,7, 12;37:10;41:9,17; 71:11 customize (2) 82:12,16 cut (2) 183:10,11 CVS (3) 44:5;45:6,11 cyber (2) 108:23;109:1</p>	<p>244:11 databases (1) 117:16 data-driven (1) 238:13 data's (1) 173:17 date (2) 85:21;168:21 dates (1) 124:4 daughter (1) 23:9 Dave (39) 6:8,14;10:7,13; 34:7,8,13;51:21,22; 88:12;90:19;98:21; 103:17;104:5;113:1, 5;119:24,25;120:22; 121:8;123:13;126:8; 142:2;143:25;158:7; 160:10;175:23; 176:16;177:6,10; 180:22,25;207:6; 224:19;231:21;233:5; 236:23;241:14,23 Dave's (1) 122:10 David (2) 6:22;10:21 Davis (1) 158:17 day (22) 16:1;19:21;28:2; 33:1;37:7,20;38:13; 39:6;40:18;42:17; 43:8,9;96:10;109:2; 110:14;147:7;157:12, 13;172:17;174:10,12; 210:4 days (5) 39:2;41:21;83:16; 95:12;211:23 day's (1) 228:10 day-to-day (1) 67:17 deal (12) 23:16;36:3;39:3; 54:20,20,21;110:14; 111:4;148:4;213:10; 220:7,13 dealing (4) 54:19;81:9;82:12; 221:8 deals (1) 44:13 dearth (1) 63:18 death (3) 115:7;123:12; 171:19 deaths (9)</p>	<p>25:23;55:20;70:12; 125:16;183:11,13; 184:18,19,20 Debra (1) 15:4 debrief (1) 71:4 decade (3) 62:1;123:24;125:11 decades (2) 85:4;114:25 December (4) 212:13,15,18; 223:16 decide (5) 13:24;175:19; 192:5;211:2;241:8 decided (4) 189:20;210:18,23; 212:15 decides (2) 92:14;206:5 decision (15) 57:1;128:23;143:5; 185:20;207:13; 210:15,20;211:3,21; 212:19,21,24;213:17, 19;224:12 decision-making (1) 211:1 Decisions (10) 77:18,18,19; 185:18;204:23;209:3; 211:22;212:2;238:9, 13 Decorating (1) 75:4 decrease (1) 183:13 decreasing (1) 47:11 dedicated (2) 81:7;107:20 deeming (1) 44:17 deep (1) 204:18 deeper (1) 129:12 deeply (1) 162:16 Deere (7) 106:22;108:15,25; 110:3;134:24;139:13; 162:22 de-escalate (1) 38:22 defeats (1) 181:21 defense (3) 116:17;121:24; 165:3 defer (1)</p>	<p>49:20 define (2) 88:7;164:21 defined (1) 232:5 definitely (9) 51:10;62:22;65:8; 89:2;98:11;175:20; 208:4,11;217:5 definition (1) 32:13 deforestation (1) 105:8 defuse (1) 58:20 degradation (1) 105:7 degree (2) 58:9;59:9 delay (4) 35:5;73:3;137:13; 188:5 delayed (4) 39:1;53:21;103:4; 188:6 delays (4) 85:1,15;86:5; 222:10 DELEON (2) 55:13,16 deliver (1) 22:10 delivering (2) 8:15;12:14 demand (2) 68:12;161:18 demonstrate (1) 194:14 demonstrations (1) 206:17 denied (3) 44:16;127:8;152:23 deny (1) 73:17 department (4) 14:15;48:4,12; 107:16 departments (3) 35:7,9;162:22 depends (1) 99:17 deploy (1) 207:16 deployed (1) 135:13 deployment (1) 154:25 deputy (2) 6:24;10:23 derail (2) 116:23;117:3 derailing (1) 119:16</p>	<p>Derek (1) 57:4 described (6) 85:22,23;140:5; 155:17;200:15;235:3 deserve (2) 28:5;67:5 deserves (2) 56:9;218:15 definition (4) 118:22;165:11,12; 209:15 designed (5) 106:3;131:25; 132:2;211:11;239:18 desire (2) 93:23;202:11 desk (1) 22:6 Despite (2) 31:11;206:21 detail (1) 30:16 detailed (2) 50:16;87:13 details (5) 75:10;79:10;80:23; 118:19,20 detained (1) 169:15 detect (4) 109:19;170:24; 171:3;185:17 detected (3) 142:13;202:15; 203:20 detecting (4) 157:7;167:19; 169:11;171:11 detection (1) 165:9 detections (1) 203:16 determine (3) 67:16;88:25;119:13 deterrence (1) 24:6 deterrent (1) 42:9 develop (3) 69:24;89:9;193:18 developed (4) 16:20;17:5;106:11; 190:2 developing (3) 15:7;106:2;190:21 development (17) 25:10;26:15,22; 28:8;48:4,12,23; 65:20;67:12;69:19, 21;138:23;196:1,9,10, 24;199:9 deviated (1)</p>
D				
<p>D9 (1) 32:1 daily (3) 21:25;31:19;39:19 damage (2) 105:6;113:18 Dan (2) 60:4;61:12 danger (1) 115:22 dangerous (7) 23:6;39:3;124:12, 17;184:15,17,23 DA's (1) 54:1 data (111) 26:9;63:17;64:7,13, 15;74:2;95:20;119:1, 6,6,14;128:17,18; 132:20,23;134:13; 138:8;142:5,10,11,15, 18;145:11,12,18; 146:11;149:1,3,7,9, 17,19,25;150:2,4; 151:9;154:6,9,11,14, 24;169:12,20;171:5; 173:18,24;179:15; 181:24,24;182:1,2,3, 5,11;184:10;187:9; 191:9;194:11,12,18, 19,19,22,25;201:20; 202:11;203:1,5,13,14; 207:1;210:4;211:20; 212:20;218:18,21,22; 223:18,21;225:13,15, 17;227:5,7,10;229:7, 9,16,23;230:4,14; 231:12,13;232:10,15; 233:4,6,6,20,25; 234:10;236:20;238:5, 7,8,12;239:17,21; 242:11;243:22;</p>				

<p>213:9 device (1) 121:14 devices (2) 115:17;120:24 diagnose (1) 165:7 dial (3) 8:20;12:19;17:1 dialogue (4) 144:7;170:15; 207:15;218:19 die (1) 169:22 difference (1) 50:22 differences (1) 50:19 different (40) 31:2;33:22;50:14, 15;71:12;73:1;82:10, 14;105:21;113:8; 119:2;125:6;137:10; 138:13,16;145:16; 146:10;149:2;154:12; 155:3;160:3;164:14, 15;166:2;167:11,17, 24;170:20;172:15; 173:25;174:4,10,12, 13;180:7,7;211:6; 213:5;219:2;245:3 differently (1) 164:17 difficult (1) 188:25 difficulty (4) 62:6,13;220:5,5 digital (1) 115:3 DIR (1) 33:5 dire (1) 167:18 direct (3) 92:5;156:2;239:21 directed (1) 117:13 direction (6) 139:19;153:15; 162:6;187:25;202:16; 208:17 directions (1) 225:24 directly (8) 32:18;104:3; 128:15;144:15; 172:11;173:5;181:3; 202:13 director (9) 29:18;30:2;45:4; 57:5;83:7;106:24; 107:3,13;215:11 directors (1)</p>	<p>196:18 directs (1) 242:4 dirty (2) 181:11,12 disadvantaged (1) 28:15 disagree (4) 73:18;158:9; 230:12;239:16 disagreement (1) 150:13 disallow (1) 92:22 disappoint (1) 165:20 disappointed (1) 33:22 disappointment (1) 51:21 disastrous (1) 116:13 discern (1) 175:14 discipline (2) 14:25;15:1 discuss (14) 50:19;61:24;79:22; 83:20;91:20;92:19; 110:20;118:18;145:6; 194:2;213:25;214:23; 223:17;232:22 discussed (5) 104:20;150:10; 228:20;237:5;240:1 discussing (3) 125:8;241:4,7 discussion (45) 49:19;51:25;54:14; 62:1;73:25;88:17,21; 103:15;104:15,16,18; 105:14;107:24;108:2; 112:15;119:17,18; 127:10;149:12; 153:25;154:6;172:2, 5,6;176:21;177:24; 199:2;200:22;201:11; 206:25;208:8,11; 213:24;214:19; 215:24;216:12,17; 217:6,11,14;218:15; 220:9;222:21;229:2; 238:22 discussions (8) 186:17;187:5,7; 201:18;216:17; 217:13;228:22; 234:19 disease (1) 169:21 diseases (3) 79:25;80:2;169:12 Disney (1)</p>	<p>57:9 disregard (1) 63:12 disrepair (1) 168:15 disseminated (1) 14:18 distance (1) 203:6 distances (1) 125:3 distinction (1) 132:10 distracted-related (1) 125:17 distressing (1) 23:9 distributed (2) 81:15;103:2 distribution (1) 82:3 disturbing (1) 32:13 disturbs (1) 32:20 ditch (3) 160:18;161:5; 180:23 dive (2) 184:5,9 diverse (1) 239:8 divide (1) 115:3 dividing (1) 167:10 division (43) 15:4,8;17:4;18:5, 17;21:2,10,10;30:10; 33:12,25;35:12; 56:25;78:24;81:17; 84:16;85:13;89:6,8; 93:9,9;103:3;106:16; 107:18;127:6;129:3; 139:20;155:8;175:17; 222:12;224:1;225:8, 10;226:5,19,23; 233:10,21;234:5; 239:21;240:1,12,12 Docket (1) 77:17 document (1) 19:19 documentation (1) 86:10 documented (1) 136:14 documenting (1) 19:10 documents (1) 79:11 dodged (1) 41:2</p>	<p>dollars (4) 45:9,10;158:3; 190:20 domain (3) 81:18,25;230:19 domestic (3) 101:16,18,18 done (39) 15:21;17:2;33:15; 36:3;66:3;68:17; 86:15;87:19;88:1; 89:18;98:1,8,25; 101:9;122:20;128:1, 23;133:7;139:1; 146:2,3,4;152:2; 153:15;155:9;160:22; 176:1;178:6;183:6; 189:23;195:6;205:12; 206:16;212:19; 215:24;216:15; 227:16,19;236:16 door (5) 7:8;11:7;22:15,21, 25 doors (1) 73:10 dots (1) 50:22 doubled (1) 170:6 double-dip (1) 208:1 doubt (1) 35:15 down (24) 16:8,17;64:11; 71:18;87:13;92:14; 111:21;113:24; 114:19;160:18;161:5; 162:20;163:19; 166:14;183:14; 188:17;189:3;198:7; 206:4;209:21;214:1; 216:13,25;241:19 DPR's (1) 64:3 draft (6) 17:14,16;33:19; 47:10;74:1;80:11 drafted (2) 129:1;137:24 drafting (1) 16:5 drafts (2) 33:18,22 dramatic (3) 52:21;58:21,24 draw (2) 101:12;209:2 drift (1) 199:16 drills (1) 42:5</p>	<p>driver (10) 106:1,3;133:20; 134:1;169:24;170:11; 191:1,12;199:22; 206:21 driverless (3) 156:8,15;200:13 drivers (1) 191:3 driving (3) 159:17;191:13; 236:6 drone (4) 141:16;188:17,18, 22 drones (2) 159:22;165:4 drop (1) 142:25 drug (3) 40:14;43:23;57:8 dry (1) 174:3 ducked (1) 41:1 due (6) 9:19;58:8;59:3; 115:21;196:22;197:3 dull (1) 179:23 dummy (1) 227:17 duration (2) 30:11;31:12 during (25) 32:4;38:13;77:11; 79:12,18;82:5;100:1; 104:20;109:3;138:14; 174:12;178:12; 200:21;201:11,18; 202:3,4,4,6,18;204:6; 220:25;223:23; 228:21;229:1 dust (3) 68:18;102:24; 199:17 duties (1) 138:1 duty (2) 22:6;40:24 dynamic (1) 174:12</p>
E				
<p>eager (3) 33:6;145:2,6 earlier (19) 61:19;70:10; 122:22;140:19; 141:16;142:5;152:11; 158:24;167:12;168:1; 182:1;187:24;188:16;</p>				

196:17;207:9;215:5; 221:4;223:23;226:20 early (3) 38:14;128:2;196:22 earth (1) 116:17 easiest (1) 152:7 easily (2) 27:15;140:3 easy (4) 35:20;22;54:18; 171:7 eat (2) 176:12;207:12 echo (3) 51:21;72:12;90:21 echoes (1) 54:19 Economic (19) 26:15;22;28:8,13; 48:4,11;65:20;86:9, 25;87:6;88:2,11;89:1; 196:1,9,10,24;215:22; 217:19 economy (4) 69:1,6;156:10; 198:3 EDD (1) 26:10 edge (1) 95:10 educate (4) 16:10;18:5;21:2; 238:25 educated (3) 158:23;221:17; 230:16 educates (1) 16:10 educating (1) 14:9 education (14) 14:13,18,21;15:6, 10;81:14,14;82:4; 84:13,21;94:24; 216:2,9;225:5 educationally (1) 17:2 effect (3) 67:8;72:19;194:14 effective (9) 15:4;17:20;33:9; 41:22;58:12;67:20; 90:25;115:13;154:3 effectively (1) 58:5 effects (2) 30:20;185:8 efficient (2) 159:12,13 efficiently (1) 245:6	effort (4) 187:23;212:5; 231:11;232:20 efforts (1) 217:10 Eh (1) 169:18 eight (9) 17:8,25;27:2;62:5; 64:1;137:10;151:16; 156:13;167:10 eighteen (2) 39:13;63:23 either (11) 59:8;64:16;89:16; 100:3;142:2;146:3; 153:14;180:6;221:5; 224:11;241:16 eject (1) 189:14 electric (1) 63:23 element (2) 169:25;194:20 elements (2) 97:6,15 elephant (1) 207:12 elevated (2) 19:13;181:13 elevating (1) 181:4 eligible (1) 136:14 eliminate (5) 46:15;134:1; 161:11;208:20,23 eliminates (2) 184:24;209:13 eliminating (4) 64:3;133:8;211:14, 15 Elimination (1) 133:3 eloquently (1) 57:21 else (24) 23:6;53:13;66:14; 76:12,16;84:8; 112:10;114:11;123:9; 134:7;135:12;142:16; 143:10;151:21; 156:22;163:12;175:7; 176:12;188:3;191:12; 221:21;226:15; 234:25;244:14 elsewhere (2) 115:20;135:13 email (1) 203:22 embrace (1) 217:15 emergency (14)	32:9;41:2;42:1; 45:21;89:17;102:21, 23;106:1;163:9; 199:25;227:24;229:3; 237:19,20 Emerging (1) 193:23 emission (1) 105:8 emit (1) 197:17 emotional (1) 37:6 emphasis (1) 100:11 emphasize (4) 65:3;89:22;173:23; 178:12 emphasizing (2) 55:23;71:20 Empire (1) 15:14 employ (1) 58:20 employed (1) 132:3 employee (8) 16:23,23;19:22; 37:12;40:20,23;41:1, 13 employees (23) 14:21;15:2;16:4; 20:22;22:1,23;25; 32:24;38:1;39:8; 44:20;47:1;52:25; 101:18;113:19; 148:14,16;175:5,21; 227:13;234:22,25; 235:2;244:1 employer (15) 31:1;32:6;33:9; 35:7,14,24;99:8; 100:2;133:17;147:13; 156:16;162:14; 168:18;170:17;172:9 employers (29) 14:11,22,23;16:21; 18:11;31:6,11;32:15, 16,22;34:17;39:19, 25;47:13;51:15; 54:11;59:2;62:13; 72:25;74:5;85:1;90:3, 8,11;91:5,8;107:6; 152:14;156:7 employers' (1) 47:2 employer's (2) 16:25;91:7 employing (1) 64:4 empowered (1) 16:25 enables (1)	81:16 enact (2) 96:25,25 encounter (1) 194:10 encountered (1) 39:14 encourage (12) 36:2,5;68:23;91:11, 13;107:25;190:4; 208:11;217:5,11,12; 223:13 encouraged (1) 91:15 encyclopediacom (1) 63:4 end (11) 70:21;92:19;93:20; 115:10,10;157:12; 172:6;175:10;213:6; 215:1;245:22 end-all/be-all (1) 161:14 endangered (1) 26:2 endangering (1) 227:12 endeavors (1) 125:19 ends (1) 37:17 endure (1) 39:18 energy (2) 164:2,7 enforceable (5) 39:15;40:4;82:3; 83:14;84:22 enforcement (14) 14:22;15:4;35:13; 38:24,25;39:1,5,10, 15;91:21;98:12; 100:11,16,17 engage (9) 17:24;82:1;108:1; 120:20;149:12;155:8; 165:18;216:16; 221:10 engaged (3) 64:25;120:7;183:20 engagement (2) 201:13;239:7 engaging (1) 201:15 engender (1) 91:17 engineer (10) 6:19,22;7:2;10:18, 21;11:1;103:7,8; 107:17,19 engineered (1) 102:24 engineered-stone (1)	79:20 Engineering (6) 107:10;111:15; 118:4,5;144:17;193:8 engineers (5) 102:3;151:15; 155:8;160:25;240:25 English (4) 7:10;9:24;11:9; 13:14 enhancements (1) 171:14 enjoyed (1) 225:1 enlightening (1) 176:25 enormous (1) 86:11 enough (24) 32:3;35:8,14;41:5; 52:12;68:11;73:4; 82:1,13;113:3;120:4; 121:19;122:25,25,25; 123:20;158:4;161:19; 162:1,3;207:3; 210:16,19;211:20 ensure (6) 47:15;57:11;59:1; 88:16;117:17;194:12 ensured (1) 108:8 ensuring (1) 194:9 enterprises (1) 55:1 entertain (2) 9:17;176:3 entire (3) 23:25;180:2;207:12 entirely (3) 147:25;191:1; 230:12 entities (1) 39:10 entrance (2) 7:7;11:6 environment (8) 61:11;116:22; 134:15;144:22; 153:23,24;186:1; 232:21 Environmental (1) 102:22 environments (2) 56:20;82:11 EPA (1) 60:12 equates (1) 64:13 equation (1) 191:1 equipment (74) 25:24;26:5,8;28:20;
--	---	---	--	--

46:13;49:2;56:13,17; 61:15,22,25;62:7,25; 63:12,14,17,20;64:12, 15;81:10;104:16; 105:21,24,25;106:10, 11,19;109:13;110:7, 9;111:1;112:22; 113:6,7,12,21;114:18; 117:15,16,18;120:21; 126:23;132:11,14,17; 134:6;140:20;141:24; 148:2;156:8,21; 163:12;175:8;178:7, 20;179:6,7,9,19,21; 181:1;182:4,6,25; 183:12;190:25; 193:14,17;194:10; 197:16;206:4,8; 221:6;242:10	eternal (1) 35:20 Europe (1) 132:15 evacuated (1) 41:8 evaluate (2) 151:11;244:12 evaluation (2) 91:17;103:2 Evan (2) 184:3,6 even (30) 14:23;19:9;20:11, 15;32:5;33:17;38:3, 25;41:16;42:24;45:8; 59:5;73:11;93:13; 95:12;99:9;116:3; 121:8;123:8;129:14; 141:4;185:1;190:10; 199:13;237:3,4,4; 238:1,7;240:21 events (3) 58:2;110:3;117:20 eventually (2) 44:24;73:5 everybody (24) 16:2,3,6,25;18:7,8; 61:7,8,8;62:2;95:10; 104:9;114:11;139:10; 152:12;175:21; 176:12;189:22;201:6; 211:2;215:8;221:10; 230:16;243:17 everybody's (2) 219:24;221:1 everyday (2) 37:18;48:15 everyone (14) 7:15;11:14;21:16, 22;52:24;55:13; 66:13,14;69:16; 107:25;120:19; 135:12;161:13; 176:13 everyone's (4) 24:1;196:8;237:23; 244:23 everything's (1) 165:10 everywhere (5) 68:21,22;74:7; 132:16,22 evidence (2) 113:22;126:15 evil (1) 110:6 evolution (1) 124:23 exacerbated (1) 57:23 exact (3) 205:10;228:5,7	exactly (8) 118:23;119:12; 157:7,11;159:7; 209:24;212:14; 226:24 example (19) 32:22;40:19;42:1; 50:17;60:20;62:8; 63:18;67:6;85:19; 87:25;109:14;116:22; 121:13;124:13;157:5; 164:9;169:10;179:25; 181:4 examples (6) 57:20;105:21; 121:22;141:19;210:6; 211:4 exceedingly (1) 117:25 except (3) 9:16;132:22;203:10 exception (1) 101:17 exceptions (1) 96:2 excess (1) 146:24 excited (2) 119:9;165:18 exciting (2) 126:24;171:23 exclusive (1) 57:25 excuse (7) 35:14,16;102:19; 127:9;129:9;160:15; 162:7 executable (2) 82:4;83:14 executive (8) 6:18,23;10:17,22; 45:4;196:18;215:11; 221:3 exhaustion (2) 124:20;125:6 exist (2) 58:18;147:1 existing (9) 62:10;106:11,21; 134:17,20;141:25; 153:23,24;229:18 exists (5) 58:13,19,21; 101:17;119:18 exit (3) 41:3;177:12,13 expand (1) 18:22 expanded (1) 30:23 expanding (1) 50:12 expect (8)	20:10;42:1;102:10; 121:21;156:6;167:7; 237:1,6 expectation (2) 195:3;224:1 expected (6) 141:21;223:22; 229:16;235:6,6,9 expense (1) 105:12 expenses (1) 156:11 expensive (1) 122:12 experience (15) 21:19;42:18;45:19; 57:25;62:13;71:23; 80:14;90:23;103:7,9; 107:7,11;129:22; 143:14;168:12 experienced (1) 57:18 experiences (5) 30:12;42:12;89:21; 127:18,23 experiencing (1) 93:16 experiment (1) 127:9 experimental (37) 56:19;107:20; 127:7,10,14;128:24; 129:1,6,19;130:22; 137:21,24;143:7,10; 148:18;155:9,16; 201:14,17;202:24; 213:7,20;223:18; 224:9;225:9;226:3; 227:4,13,25;228:11; 229:15,18;234:6; 237:9,20;238:2; 239:18 experts (1) 182:24 explain (3) 118:22;144:14; 170:18 explained (2) 57:21;80:23 explaining (1) 131:17 explicitly (3) 143:20;202:8; 228:19 explore (1) 153:14 Expo (7) 63:9;141:13; 180:24;182:13; 206:18;222:19;225:2 exposed (7) 21:24;31:19,20; 32:24;40:17;185:5,12	exposure (21) 16:4,22;18:11; 19:12;26:6;30:19; 31:4,9,10,14,14; 32:19;47:16;51:15; 80:5;134:11;139:24; 146:25;185:11; 197:19;199:12 exposures (1) 31:21 express (3) 47:9;186:19;187:14 expressed (3) 75:9;220:18;244:9 expressing (1) 49:1 extend (3) 9:4;13:3;17:21 extended (3) 9:7;13:6;92:2 extending (4) 18:24;21:11;92:16; 93:3 extension (1) 75:13 extent (5) 70:25;82:8;190:25; 191:14;234:7 external (3) 116:21;117:2; 149:25 extra (1) 179:15 extracting (1) 105:17 extreme (2) 147:7;239:25 extremely (8) 22:2;61:5;115:19; 125:14;135:18;136:8; 142:18;240:18 eye (4) 23:1;37:13;101:14; 168:16 eyeballs (1) 164:1 eyes (2) 170:22;213:8
F				
			F3 (2) 26:21;196:12 F-35 (1) 189:6 F-35s (1) 190:1 fabricate (1) 102:24 fabrication (2) 79:21;204:18 face (5) 26:5;41:5;115:4;	

199:11;218:15 facets (2) 48:14;52:10 facilitate (1) 217:12 facilitated (1) 223:3 facilities (2) 32:10;188:21 facing (2) 89:12;99:6 fact (10) 83:12;84:18;116:8; 123:11;152:22;167:7; 217:17;220:19; 223:25;237:6 factors (1) 93:19 facts (2) 123:4;167:24 fail (5) 166:9,10,10;167:5; 171:20 failed (4) 16:15;45:11; 165:14;218:24 failing (3) 56:15,20;165:12 fails (4) 137:3;167:4;203:9; 210:5 fail-safe (1) 114:1 failure (3) 113:23;185:9,9 fair (3) 182:11;220:5; 229:19 faith (1) 241:7 fall (6) 168:7,14;181:21; 201:23;211:21; 216:25 fallen (1) 115:24 fallible (1) 110:1 falling (1) 211:18 falls (1) 181:17 familiar (3) 111:2;164:9,12 families (7) 37:16;43:20;57:2; 136:16,17;216:8; 217:19 family (1) 193:16 family-owned (1) 142:22 Fantastic (4)	25:6;164:5;170:14; 201:9 FAQs (2) 80:22,23 far (11) 14:18;56:21;63:17; 81:8;92:16;129:8; 145:21;162:12,12; 229:16;230:5 farm (7) 160:19,20,20; 161:11;187:19; 193:12;203:23 farmer (1) 185:18 farmers (4) 26:23;195:7; 207:16;239:11 farming (7) 105:7,15;124:16; 138:14;147:1;184:15; 242:10 farmland (1) 64:9 farms (6) 28:20;29:4;75:22; 105:17;145:22;186:5 farmworker (9) 169:3;195:20; 215:4,12,22;216:13, 18,18,21 farmworkers (18) 56:14;107:2; 172:14,17;173:5,9,11; 196:15,19;215:13,25; 216:5;217:7,8,8,9,13; 221:16 farther (1) 74:4 fashion (2) 129:7;130:23 fast (5) 35:19;73:9,24; 210:13;220:20 faster (1) 53:22 fast-forward (1) 221:9 fatal (1) 36:25 fatalities (8) 122:24;123:2; 141:18;145:21;149:6; 173:19,20;200:16 father (1) 189:19 fatigue (2) 167:12,13 favor (2) 156:7;196:24 favorite (1) 43:10 fear (3)	41:4;45:13;127:19 feared (2) 23:4;41:16 fearful (2) 97:19;144:2 fear-mongering (2) 206:1;207:1 fears (1) 26:8 feasibility (1) 32:11 feasible (3) 9:6;13:5;202:21 feature (1) 204:25 features (6) 115:13;116:21; 133:11;168:21; 171:15;180:5 February (3) 15:17;34:18;35:23 federal (6) 26:17;153:16; 154:16,17;198:1,4 Federation (4) 47:8;72:5,16; 207:23 feed (5) 104:25;194:8; 195:8;196:15;220:2 feedback (2) 93:8;158:15 feel (30) 24:1;37:14,20; 38:19;42:16;56:10, 22;61:22;62:22; 66:23;70:8;84:24; 89:16;91:12;135:1; 143:14;149:20;150:1; 162:9,14,15;163:4; 172:1;186:14;216:16; 222:14;223:15; 227:13;232:8;244:9 feeling (3) 23:5;39:2;70:3 feels (1) 144:2 feet (4) 140:10;166:4; 202:15;207:10 fell (1) 215:23 fellow (3) 37:22;40:20;224:7 fellows (1) 229:6 felt (2) 42:20;143:6 female (1) 22:18 Fever (1) 199:17 few (15)	19:4;23:18;35:6; 39:5;63:9,9;84:1; 86:2;175:23;219:25; 222:1,6;224:5; 233:24;243:21 field (53) 61:22;63:11; 113:14,16;115:21; 117:21;126:14; 129:14,20,20,21; 130:3,12;131:15; 132:1;136:18;137:10, 12,25;138:2,5,7,17, 18,19,25;140:3; 143:13;146:23;147:7; 148:14,19,23;150:3; 155:10;156:13;167:8; 178:17;179:19; 180:10;185:2;199:6, 6;200:13;202:3; 217:2;220:7;223:25; 227:6;228:12;234:22; 235:1,22 field-packing (1) 200:15 fields (13) 64:8;127:16;130:2, 8;135:19;138:3; 148:16;149:22;171:7; 199:14;216:19;220:4; 228:2 Fifteen (1) 104:11 fighter (2) 121:2;189:6 figure (9) 13:14;115:8; 137:11;150:2;192:8; 218:16;219:6;236:13; 237:23 figured (1) 13:15 file (2) 91:12;99:7 fill (5) 48:20;102:1,9; 147:10;178:5 filled (1) 178:2 filling (1) 48:8 final (6) 33:8;34:2;82:2; 93:7;173:16;176:2 finalize (1) 33:6 finally (2) 103:4;200:10 financial (1) 151:18 find (13) 25:1;110:10; 129:22;142:12;	149:19;158:4,11; 159:25;162:1,4; 171:10;178:3;235:18 finding (2) 120:10;220:6 Fine (13) 24:19;25:2,4,6,10; 27:10,12;141:17; 147:3;152:1;189:15; 209:9;210:21 finer (1) 202:2 finish (2) 101:9;231:24 FIRA (1) 27:14 firefighter (2) 102:18;221:5 firmly (1) 211:8 First (40) 7:22;11:21;15:16; 22:17;24:19;29:7; 35:21;40:2;52:19; 53:18;62:6;63:3,3; 72:15;76:21;79:4; 84:11;86:3;87:9; 106:18;108:23; 114:15;124:7;128:22; 135:12;137:20; 163:22;187:12; 191:14;192:14;193:1; 203:12;209:11; 215:15;222:7;224:20; 227:20;235:8;239:17; 240:21 first-aid (12) 34:15,17,19,23; 35:22,25;36:3;51:22; 80:8;85:4;93:16,18 firsthand (1) 114:2 Firstly (2) 25:19;46:12 first-person (1) 90:23 fit (2) 169:23;205:15 fits (2) 16:18;18:7 fitted (1) 191:24 fitting (1) 192:1 five (9) 16:8;59:24;63:16, 25;64:20;65:5;171:9; 183:5;231:2 fix (7) 97:8,13,15;115:8; 134:25;168:19; 218:16 fixed (6)
--	---	--	--	--

32:8;52:16;53:1,3; 115:9;168:18 fixing (1) 115:4 Flag (6) 106:12,20,22; 108:15;147:20; 152:11 flags (1) 50:11 flail-mowing (1) 202:5 flare-up (1) 109:22 flashings (1) 20:19 flavors (1) 106:10 fleet (3) 109:14,19;116:25 fleets (1) 135:11 flexible (2) 9:8;13:7 floated (2) 208:5;212:11 flood (1) 91:3 Florida (1) 184:12 flow (1) 23:23 fly (1) 182:8 flying (1) 190:1 focus (9) 16:3;35:10;82:15; 105:14;119:22;149:5; 193:10;208:12;218:9 focused (3) 27:6;166:19;196:13 folks (16) 63:8;109:5;110:5; 118:1,6;124:9,24; 141:13;146:13;147:4, 5,11;161:2;164:9; 165:8;170:18 follow (9) 13:13;32:16;35:15; 98:23;142:9,19; 159:9;160:12;238:15 followed (4) 41:4;154:19; 190:19;225:20 FOLLOWING (6) 10:6;15:1,2;104:18; 126:7;225:19 follows (1) 203:14 follow-up (3) 112:11;129:10; 130:25	Food (11) 26:21,24;57:5;68:9; 69:17;104:24,25; 105:13;107:1;197:9; 216:4 food-production (1) 105:5 force (5) 27:20;159:22; 188:17,22;189:2 forced (2) 188:17;189:3 forces (1) 98:7 forefront (1) 215:17 foremost (1) 215:15 forget (2) 60:11;238:13 forgot (1) 187:20 form (2) 57:18;58:17 formal (6) 75:15;92:11;99:15; 186:20;187:12; 239:22 formally (1) 154:18 format (1) 149:11 formation (1) 195:12 formats (1) 206:17 former (2) 16:23;216:18 forms (2) 56:11;203:22 forth (3) 180:2;239:2;241:20 Fortunately (2) 41:5;44:21 Forum (6) 30:3;144:17; 152:16;153:1,4,13 forward (56) 51:5;52:5;64:18; 69:11,18;75:15; 90:14;93:18;105:11; 106:7;110:12,20; 112:5;119:14;124:13, 14;126:25;138:22,24; 139:4;143:16,18; 144:13;148:4;150:8; 153:20;154:8;168:20; 171:16;178:11; 186:17,19;191:16; 192:6;195:13;201:19; 202:13;204:16; 206:13;207:3;210:18; 211:16,20;214:23;	216:10;220:20;225:5, 15;230:13,23;233:7; 239:16;241:2,15; 242:1;245:6 foster (1) 48:22 found (7) 8:5;12:4;44:21; 100:1;138:2;149:6; 192:7 Foundation (6) 47:8;195:20; 198:19;199:2;215:4, 12 foundational (1) 124:14 founded (1) 55:19 founder (1) 106:20 four (13) 20:4;22:9,13;42:18; 59:22;92:4;163:18, 18,20;170:20;174:1; 189:19;243:15 fourth (2) 221:5,7 Fowler (2) 29:13;76:1 framework (1) 63:14 frankly (7) 73:25;149:4; 200:10;208:18; 209:23;213:1,19 free (1) 56:10 freely (2) 143:23;173:6 freight (2) 15:22,22 frequency (3) 30:10;31:13;58:16 frequently (3) 79:21,22;83:1 Fresno (13) 26:21;27:2,14; 47:24;48:4;65:19; 68:1;76:7;107:10; 158:17;159:9;196:1,9 Fresno-Merced (1) 26:20 Fresno's (1) 48:11 friend (1) 210:9 friends (4) 23:10;50:6;53:25; 193:16 frightening (1) 63:6 front (16) 22:6,8,9,23;42:8;	110:8;115:10;121:16; 136:2,10;186:23; 189:10;222:8,16; 227:18;228:3 front-end (1) 21:20 front-of-store (1) 44:20 fruit (1) 125:2 fruitful (1) 28:24 fruition (1) 175:13 fruits (1) 105:3 frustrated (1) 30:11 frustration (2) 85:7;93:17 fuel (1) 185:24 full (4) 85:23;198:6; 207:13;241:7 full-time (1) 86:14 fully (1) 110:19 function (2) 26:4;212:4 functional (2) 169:14;193:7 fundamental (1) 73:19 funded (1) 107:15 funding (2) 26:17;27:17 funny (1) 124:8 further (9) 59:9;124:24; 147:19;150:10; 155:18;198:14;205:5; 214:23;245:20 Furthermore (5) 26:4;68:13;111:13; 147:2;202:8 Future (19) 26:21;45:7;48:14, 20;69:22;87:3;137:4; 158:20;167:6;216:4; 217:16;220:10;225:5; 226:2,8;227:15; 243:18;244:6,20	game (1) 159:20 gang (2) 44:25,25 gap (1) 147:10 gaps (2) 38:15;48:20 gases (1) 105:9 gate (1) 173:22 gather (4) 22:10;218:17,21; 232:10 gathered (3) 27:14;173:17; 233:16 gathering (1) 234:10 gave (1) 169:10 gazillion (1) 164:13 geek (1) 188:10 general (20) 17:3;30:5;32:12,22; 36:19;40:4;44:7; 45:17;55:23;56:8; 66:21,22;67:2,18; 70:5;71:10,14;91:6; 100:24;157:18 generally (5) 19:17;165:1,2; 188:11;205:15 Generic (1) 82:9 gentleman (4) 15:17;134:23; 146:15;223:22 genuinely (1) 218:11 getaway (1) 22:24 gets (4) 35:2;88:16;157:11; 175:22 Gitaz (1) 45:5 given (11) 15:9;16:24;27:18; 82:10;83:1,3;127:18; 130:25;173:5;221:13; 222:20 giving (3) 71:16;93:6;162:5 Glad (6) 6:5;53:16,17;54:13; 189:22;222:18 gladly (1) 27:18 glitch (1)
		G		
		gain (1) 119:8 gains (1) 105:5		

<p>115:25 glitches (1) 46:21 global (4) 27:13;157:20; 158:4;193:19 globally (2) 68:21;149:2 goal (7) 27:5;69:20;133:3, 24;179:3;193:12; 195:14 goals (1) 69:20 God (2) 148:7;160:20 goes (14) 86:7,12,17;94:24; 121:1;122:24;138:14; 169:16;175:22;183:4; 205:1;206:4;230:5; 241:21 golf (3) 105:23;106:13; 140:16 GONZALES (2) 40:11,14 Gonzalez (15) 6:21;10:20;77:14, 15;101:11;242:19,21, 24;243:1,4,6,8,10,13; 245:12 Good (65) 6:3;13:18;14:11,14; 15:3;18:16;21:16; 29:20;30:1;34:12; 36:12;40:10,11,12; 44:3;46:10;48:5,9,10; 50:2;52:2,25,25;57:4; 60:3;62:3;66:13; 69:16;70:2;71:21; 74:24,25;77:16; 81:14,20;82:9,10; 83:13;87:25;94:8; 101:14;110:6;112:20; 118:24;125:13; 148:25;156:6;160:8; 176:24;177:21; 183:12,14;184:1; 187:21;196:11; 198:21;208:10; 211:19;214:12,15; 237:10,11,14;241:23, 24 good-paying (1) 158:10 Google (1) 163:24 government (9) 28:8;107:4;112:6; 116:17;149:13; 193:21;194:2;195:10; 201:13</p>	<p>governs (1) 182:14 grab (1) 176:12 grabbed (2) 22:14,17 Gracias (1) 13:16 grains (1) 174:3 grandchildren (1) 95:8 grant (4) 9:21;26:17;153:19; 196:13 granted (8) 123:6;127:9;225:9; 226:4,9;227:25; 230:24;237:5 granting (1) 226:12 grape (3) 130:17;202:18; 216:22 grape-harvest (1) 130:18 grapes (5) 125:2,2;130:20,21; 131:14 grasp (1) 20:11 grateful (2) 28:3;170:13 great (18) 13:17;14:15;34:12; 66:3;68:23;85:21; 97:1;122:11;126:24; 138:19;145:12; 165:10;168:11; 179:25;181:14; 192:19;199:22;225:4 greater (2) 74:4;220:2 greatest (1) 25:19 greatly (8) 27:16;30:23;50:12; 52:19;68:14;80:17; 218:5;219:14 greenhouse (1) 105:9 grew (1) 124:2 Grewal (10) 106:23;114:12,12; 135:4,7;154:10; 166:19;174:9;186:13, 13 grid (1) 64:1 grievances (1) 21:7 grocery (11)</p>	<p>21:17,21;36:15,21; 37:2,4;38:10;39:14; 57:8;58:3,10 ground (6) 126:13;135:22; 167:8;171:24;179:8; 217:9 groundwater (1) 105:8 group (4) 33:22;192:21; 217:6;239:9 groups (3) 28:11;64:20;84:16 grow (1) 197:22 grower (5) 131:23;133:13; 157:11,25;158:2 growers (14) 64:22;107:5; 112:17,22;113:6,12; 130:10;183:18;194:1, 8;195:10;214:10,16, 22 grower's (1) 169:17 growing (5) 27:18;56:3;194:8; 216:22;220:3 grows (1) 132:17 growth (2) 28:14;158:18 guarantee (3) 97:13;133:17;167:2 guard (4) 22:6,25;41:20; 80:17 guardrails (1) 123:8 guards (7) 24:5;38:11,12; 41:19;43:3,3,5 guards' (1) 38:16 Guerrero (1) 55:16 guess (16) 65:17;82:18;95:6, 22;131:22;139:1; 146:1;187:20;222:1; 226:18,22;227:23; 228:17,25;229:6; 235:11 guidance (7) 47:13;71:14;95:1; 180:16;190:19,19; 201:20 guidelines (2) 95:4;190:1 gun (2) 23:3;40:23</p>	<p>gunshot (1) 40:25 guy (5) 23:1;29:7;109:2,21; 151:17 guys (12) 151:1;160:21; 175:23;176:1,25; 181:2,2,6,7,12; 191:18;192:4</p>	<p>132:13;137:14; 145:16;167:25; 174:11;204:22; 226:25 happens (17) 38:18;39:21;45:7; 71:5,18;93:14;97:17; 114:2;119:20;122:19; 126:16;135:20; 145:18;168:8;205:22; 206:3;218:19 happy (10) 110:14;135:5; 162:16;165:11,11; 189:18;192:21; 201:19;213:25; 214:18 harassment (1) 37:17 hard (8) 15:23;52:15;55:14; 94:11,14;118:5; 125:13;157:21 harder (1) 190:10 hardest (1) 190:9 hardship (1) 147:7 hardware (1) 206:5 harm (2) 38:4;56:14 harmful (4) 30:20;72:21;236:6, 7 harming (1) 199:18 harm's (1) 38:9 Harrison (22) 6:14;10:13;78:11, 12;104:5,7;119:24; 120:1,5;122:1;142:3; 158:7;160:12;177:4; 224:17,20;225:1; 236:22,25;241:12; 243:4,5 harrowing (2) 66:21;95:18 Hart (1) 14:14 harvest (3) 130:17;163:12; 202:18 harvested (1) 130:20 harvesting (5) 131:14;135:20; 138:16;140:2;234:24 hash (2) 152:15;153:5 hate (2)</p>
H				
			<p>hack (1) 121:15 hackable (1) 116:14 hackers (9) 108:9,20;110:4; 116:11,16;120:6,9; 121:10;142:11 hacking (6) 46:22;110:5; 113:10,23;116:19; 142:9 half (6) 47:12;62:1;183:10, 11;210:24;211:2 Hall (1) 124:5 hand (4) 15:21;73:23;123:4; 244:12 handicapped (1) 22:22 hand-in-glove (1) 98:14 handle (3) 42:6;111:6;147:6 hands (4) 59:18;123:8;139:8; 142:1 happen (26) 16:14;39:12;42:23; 43:18;45:13;70:13; 71:19;99:10;116:19; 122:21;123:3,16,18; 124:10;141:18; 151:22;152:17;160:4; 163:10;205:18; 209:10;212:24; 216:12;217:4;223:18; 243:18 happened (13) 27:9;41:10;70:11, 20;71:2,4;109:20; 144:25;188:12;189:4; 209:11;216:23; 228:15 happening (16) 25:25;39:9;55:1; 58:16,17;88:18; 96:10;97:25;114:20;</p>	

<p>37:1;159:18 hazard (7) 15:25;67:14;72:20; 73:15;90:7;91:6; 133:3 hazardous (1) 197:17 hazards (14) 28:17;35:3;56:3; 67:9,16;73:9;99:7; 100:1,1;102:23; 139:23;141:4;178:22; 199:12 head (1) 40:23 head-on (1) 195:4 heads (2) 135:22;138:13 Health (39) 6:6,14,25;7:24,25; 9:16;10:13,24;11:23, 24;13:21;20:10; 24:10;30:20;35:7,8, 16,17;36:13;40:13; 42:11;43:13;45:20; 46:18;47:11;55:18; 56:8;57:11;88:23; 90:2,7;96:22;105:12; 106:16;107:18;116:8; 165:7;166:5;199:9 healthcare (7) 40:6;47:17;67:4,19; 69:23;74:3;136:15 healthy (1) 91:7 hear (69) 9:5;13:4;25:3,4,20; 26:1,8;29:5,15,19,21; 34:9,10;47:25;48:5; 49:14;50:1,3,5;53:16; 65:16,21,22;66:9,10; 69:12,13,14;72:6; 75:23;76:3,8,14;85:6; 89:24;95:13;104:6; 108:10;112:24;113:1, 4;117:25;119:10; 122:23;125:7;127:24; 135:10,16;145:12; 149:5;160:14;182:22; 183:2;192:16,17; 196:2,3;198:20,22; 201:5,6,7;205:17; 213:3;214:13;215:6, 7,8;220:18 heard (53) 35:4,15;36:4;40:25; 63:7;66:21;70:9;73:7; 82:7,25;84:25;85:19; 90:6;91:25;92:3; 95:17;110:21,22; 120:12;122:22;126:9; 141:16;142:5;143:8;</p>	<p>148:11,12;149:1; 151:14;158:8;169:9; 173:14;182:1;186:21; 197:12;206:3,9; 208:13;210:1;211:4; 213:1,5,11;220:1,4; 222:7;223:23;225:10; 226:20,21;230:21; 232:21;233:8;239:8 hearing (20) 30:14;36:18;78:1; 79:7,12,17;85:2,22; 126:12;130:3;143:5; 146:1;155:15;161:1, 8;211:17;233:5; 239:6;242:17,17 hearings (4) 9:18,19;211:5; 223:7 heart (2) 147:12;185:9 Heartbeat (1) 206:10 heartbeats (1) 111:16 heat (37) 15:12;16:11,14; 26:6;28:16;55:23,25; 56:2;68:18;79:13,14; 81:8,21;82:20,23; 85:2,20;86:1;88:1,3; 94:18;95:3;99:1,2; 100:3,8,9,12,18; 124:20;125:5,8,12; 146:24;171:3,4; 222:24 heat-fatigue-related (1) 125:15 heavily (2) 22:7;183:20 Heavy (1) 125:3 heavy-duty (5) 115:11;117:4,6; 135:11;167:11 Hector (3) 69:10,12,17 hedging (1) 202:5 heels (1) 197:25 held (1) 102:18 Helen (6) 29:17,19;30:2;34:5; 50:10;75:9 Helen's (1) 51:13 Hello (10) 29:5;36:12;46:5,6; 49:14;55:13;65:16; 69:16;195:21,22 help (16)</p>	<p>23:21;26:24;38:3; 40:22;53:3;70:8;73:2; 87:3;88:25;97:4,15; 124:25;125:4;173:12; 206:23;217:12 helped (6) 22:10;42:13;97:21; 216:20;238:19,19 helpful (7) 21:9;42:4;117:25; 119:13;129:17;131:5; 138:20 helping (1) 147:10 helps (7) 48:20;77:3;119:7,7, 7,7;185:25 herbicides (1) 185:8 here's (4) 51:7;71:5;113:15; 157:12 Hernan (4) 195:19;215:4,6,11 Hernandez (6) 195:19;215:4,7,10, 11;217:21 hesitate (1) 114:8 Hey (9) 15:13;51:7;71:4; 142:23;146:21; 147:14;172:14;181:5; 237:21 Hi (5) 38:2;68:4;91:25; 198:21,24 hierarchy (2) 133:1;134:17 high (2) 54:3;58:9 higher (6) 93:15;158:2; 209:14,15;215:19; 217:18 higher-paying (1) 160:7 higher-risk (1) 220:6 highest (2) 82:15;219:7 high-hazard (1) 91:4 highlight (4) 25:14;143:17; 149:18;197:13 highlighted (1) 47:7 highly (1) 60:10 high-paying (1) 158:6 high-poverty (1)</p>	<p>197:23 high-tech (1) 28:14 high-unemployment (1) 197:24 high-value (1) 125:1 highway (1) 33:17 Hills (1) 21:22 hire (2) 43:2;88:18 hired (3) 17:11;41:20;71:17 hiring (2) 87:1;101:25 history (2) 98:1;209:11 hit (5) 137:11;167:21,21; 172:2;189:8 hits (1) 95:7 hold (8) 7:22;9:10;11:21; 13:9;46:14;55:8;77:1; 211:8 holding (1) 107:7 home (5) 42:19;43:19;95:7; 175:22,24 homeowner (2) 20:16,20 honest (2) 122:2;209:23 honorable (1) 15:23 hope (13) 17:22;59:10;90:13; 113:16,16,17;118:3, 20;143:19;148:7; 172:8;186:7;192:4 hopeful (2) 28:24;33:25 hopefully (2) 68:7;108:16 hoping (4) 29:22;128:8; 227:14;235:10 horrible (1) 175:24 horse (5) 115:7;124:10,11; 136:10;225:7 host (3) 110:3;170:17;223:5 hosted (1) 193:25 hot (1) 15:24 hotbed (1)</p>	<p>37:3 hotline (1) 38:24 hour (4) 158:3,11;205:2,2 hours (10) 9:4;13:3;39:1; 50:21;64:10,11; 191:9,11;203:7,15 house (1) 20:18 Housing (1) 14:4 hub (2) 26:18,25 hug (1) 23:11 huge (7) 33:2;51:9;68:8; 82:6;157:1;178:11; 191:16 human (22) 106:3;123:12,12; 124:20;135:25;136:6, 6;137:13,22;138:5; 169:25;170:5,6; 171:1,9,10;173:17; 184:24;203:16;211:6, 10,14 human/tractor (1) 235:16 human-collision (1) 128:19 humans (14) 122:17;171:4,7,12, 12,15;194:16;202:15, 21;203:20;230:3; 235:10;236:6,11 humorous (1) 124:13 hundred (5) 68:9,10;88:3; 120:17;170:5 hundred-percent (1) 120:14 hundreds (1) 126:10 hung (1) 86:23 hungry (1) 146:6 hurdles (1) 87:6 hurt (8) 117:7;136:1,16,20; 151:3,25;189:13; 216:24 hurting (1) 74:6 hydraulic (1) 210:21 hygienist (1) 60:4</p>
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hypothetical (3) 178:18,24;183:14	31:3;33:2;82:13,14; 88:25	215:21;216:21	independence (1) 28:1	110:11;116:12; 129:16;143:7,9,15,20; 144:3;145:2;148:11; 157:6;162:8;164:3; 175:18;201:16;207:3; 223:8,14;224:7,10,10; 231:8,18;232:8,13; 233:14,15;234:16
I	impacted (2) 33:10;217:9	Improved (1) 185:14	independent (1) 171:3	informative (1) 174:19
I-Create (1) 26:25	impacts (1) 137:1	improvement (1) 141:25	indirectly (1) 32:18	informed (1) 221:17
idea (13) 51:2;84:15;97:18; 109:6;122:18;151:23; 204:20;208:5;209:20, 21;212:10;237:11; 243:24	impanel (2) 28:18;192:5	inaccurate (1) 116:12	Individual (3) 9:6;13:5;218:25	infrastructure (4) 47:6;73:14,14; 167:6
identified (1) 44:25	impaneled (1) 198:13	Inaudible (1) 104:1	individuals (3) 22:8,14;184:14	inherent (2) 133:5,19
identify (3) 62:17;100:10;116:5	impediment (1) 134:18	incentives (1) 28:9	Indoor (15) 15:12;16:11,14; 79:13,14;81:21; 82:23;85:20;88:3; 99:1,3;100:3,12,18; 222:24	inherently (1) 210:2
ie (1) 108:8	imperative (2) 55:25;70:14	incidence (1) 58:24	industries (7) 60:4;192:24 32:15;33:16;36:19; 67:21;69:23;96:2; 159:4	in-house (2) 65:12;88:18
Igino (6) 106:19;117:13; 120:2,4,5;176:9	impetus (1) 115:8	incident (21) 22:19;23:12;37:9; 38:18;39:4,21,25; 41:18,21,42;16,20,22; 43:17;44:15;149:7,9, 17;150:4;154:5,8; 242:11	industry (60) 17:3;21:17;27:22; 28:8;30:5;31:25; 32:13,22;33:7,23; 40:4;43:23;44:7; 45:17;55:23;56:8; 57:14;66:21,23;67:2, 18;70:5,10;71:14; 73:12;91:6,19; 100:24;108:14,17; 110:17;112:1,8; 117:25;119:15;120:7, 21;121:23;125:23; 147:11;149:7;164:19; 172:10;179:8,11; 193:9,14,18,22;194:1, 7;195:10;206:10,24; 207:14;212:5;216:23; 217:4;234:10;238:24	initial (1) 185:11
ignorance (1) 81:19	implement (4) 31:12;45:11;93:11; 220:15	incidents (17) 21:24;38:11;39:9, 12,19;40:2;42:10; 45:7,12;59:10;71:24; 95:14,17,25;96:8; 125:19;188:9		initiate (2) 202:14;203:9
III (2) 102:2,10	implementation (2) 67:13;111:5	include (8) 31:17;35:5;62:17; 80:2;105:25;185:9; 193:7,19		initiated (2) 153:15;245:4
IIPP (4) 16:14,21;99:19,21	implementation-specific (1) 111:25	included (5) 105:7;108:1;193:8; 223:24;233:14		Initiative (1) 196:12
illegally (1) 182:11	implemented (2) 47:5;190:12	includes (2) 96:1;203:6		initiatives (1) 216:4
Illinois (2) 184:11;193:25	implementing (3) 97:22;138:15; 144:12	including (19) 8:1;11:25;24:2; 32:20;35:18;36:19; 43:22;57:19;67:14; 107:2,7,12;116:22; 194:3;205:4;206:17; 225:3;242:5,10		injuries (10) 37:1;55:20;123:1; 125:9,16,17;149:5; 200:16;216:23;217:4
illness (9) 79:14;81:8,21; 82:20,23;94:18;95:3; 99:11,16	implements (1) 203:23	incomes (1) 136:19		injury (4) 99:11,16;115:7; 123:12
illuminate (1) 145:7	implication (1) 194:5	incomplete (2) 142:18;154:24		in-kind (1) 203:10
illustrates (1) 33:23	implied (1) 62:6	incorporate (2) 46:25;242:9		Inland (1) 15:14
illustrative (1) 188:14	implore (1) 28:18	increase (10) 26:24;28:6;32:14; 52:13,21;68:15; 69:25;141:20;186:4; 216:5	industry's (1) 34:1	Innovation (3) 26:21;154:2;196:14
image (1) 171:10	importance (3) 56:5;173:23;197:12	increased (3) 57:13;58:16;170:4	inequities (1) 115:5	innovations (1) 105:10
imagery (1) 203:19	important (35) 17:6;33:11;52:9; 82:9;83:12;84:19; 89:22;97:9;118:19; 125:13;132:10;139:3, 14;141:7;144:3; 146:20;149:10;150:1; 151:14;172:10; 173:10;179:12,20; 186:23;188:8,25; 190:23;197:14,16; 198:12;199:9;201:11; 218:17;221:13;234:8	incredibly (2) 53:11;147:3	inescapable (1) 221:2	innovative (2) 105:16;121:4
images (1) 138:13	importantly (1) 28:16	indeed (1) 197:3	inevitable (1) 151:6	in-person (12) 8:11,12;12:10,11; 13:19;36:9;55:5,9; 177:23;183:25; 187:17;206:17
imagine (4) 109:2;124:16; 140:3;233:8	impossible (2) 53:10;89:25		infectious (1) 80:2	in-phoned (1) 45:24
immediate (2) 202:6,10	impractical (1) 42:3		infinity (1) 163:20	input (2) 77:12;195:9
immediately (8) 35:10;40:5;41:7; 111:21;116:5;137:8; 183:6;205:1	improve (8) 24:3;28:7;69:1; 98:11;184:25,25;		influence (1) 97:14	inside (1) 164:17
immense (1) 194:11			influencers (1) 97:3	insight (1) 86:4
immigrant (1) 142:21			inform (2) 58:19;220:15	insightful (1) 77:3
impact (9) 20:15,20,24;30:9;			informal (2) 57:16;59:7	
			information (31) 75:11;96:12;99:22;	

<p>inspection (2) 35:13;100:2 inspections (1) 91:16 inspired (1) 63:4 installation (1) 200:8 instances (4) 99:10;203:8,8,17 instead (6) 88:19;132:1;133:7; 180:18;181:2;183:13 instigator (1) 58:7 Institute (1) 112:18 instituted (1) 97:24 instruction (1) 180:13 instructions (6) 8:4;10:2;12:3; 84:17;205:6,23 insufferable (1) 39:19 insurance (1) 194:4 insured (1) 114:22 integral (1) 33:8 integrate (1) 28:20 intend (2) 59:18;123:16 intended (5) 115:14;131:25; 168:25;170:9;190:14 intense (1) 86:1 intent (4) 51:18;148:15,17; 230:11 intention (4) 138:4;200:11; 228:11,18 intentionally (1) 227:17 interact (2) 147:18;227:6 interacting (2) 129:23;225:3 interaction (3) 129:18;235:10,16 interactions (2) 227:16,19 interest (2) 60:5;211:9 interested (5) 118:21;169:3; 183:2;188:9;213:3 interesting (7)</p>	<p>150:25;188:11; 189:4,24;191:7,9; 220:9 interests (1) 106:24 interference (4) 108:9;114:23; 116:10,11 interferences (1) 116:20 interim (3) 31:12,15;98:25 interject (2) 172:1,19 interjection (1) 234:3 intermediate (1) 141:10 internal (3) 38:21;80:4;117:1 internally (1) 171:6 international (2) 48:18;182:24 internet (1) 115:2 interpretation (1) 55:14 interpreters (1) 101:5 interrupt (1) 131:9 interruption (1) 108:8 intervention (1) 39:17 interview (1) 129:22 interviews (3) 102:1,5,7 intimacies (1) 182:5 into (49) 9:24;19:5;22:5,22; 53:8;60:24;61:22; 64:11;86:7,17;109:3, 11,15,21;113:13,15, 16,17;124:11;126:1; 128:15;131:24; 142:17,25;144:17; 146:23;150:17; 153:16;155:4;159:1; 161:7,10;164:2; 168:15,23;172:14; 180:9;184:5;187:12, 23;198:9;209:20; 212:5;216:14;218:5, 15;220:20;231:11; 245:5 intrinsically (1) 108:24 introduce (4) 61:21;102:4;</p>	<p>104:21;106:17 introduced (2) 105:16;114:25 introduction (1) 19:5 invented (1) 217:1 invest (2) 24:7;169:17 invested (1) 168:22 investigate (2) 28:19;99:11 investigation (5) 143:12;153:11,21; 180:18;220:25 investigations (3) 107:22;155:11,18 investing (1) 115:2 investment (5) 113:21;197:7,21, 25;198:9 investments (2) 198:2,5 invitation (2) 8:18;12:17 invite (5) 8:2;12:1;76:19; 142:2;223:6 invited (1) 9:16 involve (1) 129:5 involved (8) 17:9,11;67:12;90:6; 158:21;194:21; 201:13;210:11 involvement (3) 142:20;143:22; 226:11 involving (4) 22:20;33:9;128:24; 189:6 Iowa (2) 174:2;184:11 IP (1) 119:3 irrigation (2) 159:10,11 irrigators (1) 159:12 ISO (2) 182:14;183:4 issue (55) 8:1;11:25;16:19; 35:2;50:11;52:3,7,8; 56:8;58:5;59:5,5; 66:24,25;71:9;81:10; 85:14;88:13;90:2; 94:25;95:12;96:21, 23;97:10,13;99:17; 101:14;105:4;112:20;</p>	<p>114:18,20,21;116:9, 10;127:1;132:25; 139:6;158:5,9;161:8, 14;166:15;170:7; 205:11;209:23; 210:21;213:13,24; 218:5;230:25;238:6, 24;239:6,8;241:3 issues (32) 35:3,19,21;36:4; 50:15;51:14;52:1; 53:21;60:10;62:18, 18;77:9;90:4,5; 117:18;123:3;126:21; 152:15;153:5,14; 157:8;178:19;185:17; 192:2,8;211:5;221:8, 11;222:8,15,22; 223:12 items (10) 8:1;9:10;11:25; 13:9;37:8;73:22; 104:19;240:2;244:20, 21</p>	<p>20:23,23;26:9;27:6, 15;28:14;69:25;74:9; 151:5,7;152:1;158:6, 10;160:8;161:23; 162:15;184:18;186:3; 196:11;209:7,13 jockey (1) 159:20 jockeys (1) 160:1 John (9) 24:17;104:13; 105:19;106:22; 108:15;110:3;139:5, 13;162:22 JOHNSON (12) 18:16,18;49:8,14, 20;50:24;75:9; 192:15,17,19,22; 225:14 Johnson's (1) 18:2 join (7) 8:6;12:5;23:10; 103:9;145:2;201:19; 245:17 joining (3) 8:4;12:3;106:14 joins (1) 107:9 joy (3) 159:19,19;209:8 judgment (1) 44:16 jump (13) 48:8;114:7,8;132:8; 135:5,6;137:18; 142:2;143:3;161:5; 170:12;187:7,9 jumps (2) 160:17,18 JERGENS (5) 61:14,14;178:2,5,7 jurisdictions (1) 98:2 jut (1) 170:12</p>
J				
<p>jail (1) 44:24 Jake (3) 201:3,5,12 January (2) 22:4;189:5 Jason (3) 234:16,19;235:13 Jassy (6) 106:23;114:12; 144:1;156:11;186:13; 200:15 Jeff (2) 61:14;178:7 Jen (2) 7:4;11:3 Jessie (2) 7:4;11:3 Jet (2) 121:13;189:6 jets (1) 121:2 Jim (1) 224:17 job (32) 13:17,18;14:16; 15:20;19:8,9;25:13; 27:4;37:25;42:24; 45:14,14;48:20; 59:13,13;60:23;67:5; 70:2;71:21;90:9,9; 159:1;161:19,25; 169:3;184:15;186:4, 5;208:19,21,22; 209:13 jobs (21)</p>				
K				
<p>Kansas (1) 155:4 Kate (3) 78:5;91:24;238:4 Kate's (1) 237:16 Kathleen (2) 6:10;10:9 keep (21) 42:24;95:24;96:3; 138:24;146:8;156:17; 160:19,25;161:8; 170:21;175:5,21;</p>				

<p>180:4,8;196:15; 210:16;211:13,17; 237:20;244:4,4 keeping (4) 25:20;31:1;109:6; 208:15 keeps (1) 145:20 Kelly (2) 48:3,10 Kennedy (23) 6:11;10:10;78:13, 14;138:12;144:9; 145:9;172:7;176:3,8; 226:16,18;227:2,23; 228:17,25;237:15; 238:11;242:14;243:6, 7;244:23;245:7 kept (2) 167:9;212:8 Kernazitskas (2) 6:22;10:21 key (3) 15:6;70:2;206:4 kick (1) 108:2 kids (1) 95:8 kill (3) 120:19;141:5;151:3 killed (4) 23:8;43:19;133:15; 210:24 kilometers (1) 203:15 kind (38) 16:4;18:21;21:7; 45:6;54:19;58:10; 62:24;71:7;76:22; 80:22;89:15;97:20; 98:10;121:5;122:3, 18;123:18;126:7; 143:4,20;145:24; 151:11;152:11; 156:24;161:16;175:9; 181:25;184:5;188:9, 9;202:19;209:18; 212:16;219:11; 224:21;225:8;231:6; 244:21 kinds (6) 54:4;127:16; 133:11;155:20;157:1; 190:25 kit (5) 34:17,19,23;35:25; 51:22 kitchens (1) 27:23 kits (6) 34:15;35:22;36:3; 106:11;184:4;200:6 knew (5)</p>	<p>16:12,14;52:22; 72:21;124:3 knife (2) 37:8;39:4 knives (1) 71:6 knocked (2) 168:14;200:1 knowledge (2) 194:23;221:18 known (9) 31:19;55:18;72:20; 87:9;101:25;102:25; 111:22;117:22;185:6 knows (7) 16:25;146:18,18; 160:20;185:4;209:24; 210:22</p>	<p>190:15;210:21 landing (5) 190:2,5,8,12,14 landscape's (1) 119:1 language (5) 50:20;51:1,3;60:18; 75:15 laptop (1) 170:1 Lara (1) 101:1 large (3) 25:13;106:2;140:25 largely (1) 142:21 larger (4) 105:25;106:12; 140:6,16 largest (1) 174:1 Lasczc-Davis (1) 6:11 Lasczcz-Davis (1) 10:10 last (29) 17:7,25;27:15; 33:12;37:22;42:20; 60:1;63:1;74:15,19; 76:13;85:20,23; 88:15;100:6;102:13; 125:11;127:8;128:23; 168:10;184:6;188:12, 12,13,16;204:6; 206:3;213:19;234:19 Lastly (4) 47:15;56:12; 147:12;217:15 LASZCZ-DAVIS (40) 77:21;78:4,15,16; 81:3;82:25;83:8,11, 19;94:3,5,8,11,13; 96:11,15,18;98:6,14, 18;112:25;147:22; 148:20,25;150:7; 219:22;221:12;230:8, 10;234:14;235:8; 238:10,15;241:6,17, 23;242:2;243:8,9,11 late (3) 22:4;38:14;203:14 later (9) 16:16;23:4;39:1,2; 44:25;74:12;128:11; 131:23;224:13 latest (1) 245:17 Laura (21) 6:15;7:3;10:14; 11:2;83:24;86:21; 88:9;90:17;104:7; 128:15;131:1;142:2; 143:2;172:25;177:8;</p>	<p>225:24;231:22,23; 232:24;240:10; 241:24 Laura's (2) 90:22;128:21 law (11) 38:24,25;39:1,5,9; 52:16;54:5,14,16; 98:12;132:13 laws (2) 35:16;98:5 lay (3) 88:8;110:7,8 layer (1) 205:12 laying (2) 160:18;161:5 lead (48) 17:7;18:3,23;19:13; 20:19;30:5,18,19; 31:17,19;32:16,19,24; 34:21;47:10,16;51:4; 60:5,11,14,16,19,21, 23;61:6;72:10,12,17, 19,21;75:8;79:4,4; 81:8,22;82:20,23; 84:15;85:3;89:15; 92:1,7;94:18;95:3; 107:19;108:3;186:4; 240:4 leader (3) 48:17;108:25;109:1 leadership (1) 107:7 leading (3) 14:15;36:25;116:12 leads (5) 126:1;128:15; 186:6;197:1;209:4 leaf (1) 157:9 leaks (1) 120:10 learn (10) 42:1,5;128:8; 147:15,16,17,18; 152:3;182:16;212:21 learned (5) 72:18,18,20;199:3; 223:21 Learning (7) 27:24;41:24; 118:21;128:7,7; 150:15;159:1 least (13) 27:6;51:6;62:5; 85:24;98:16;102:4; 142:22;151:9;154:3; 190:5;191:15;238:20; 244:10 leave (2) 21:4;196:21 leaving (4)</p>	<p>38:15;43:9;45:14; 230:25 led (1) 45:2 Lee (4) 15:4;74:21,24;75:1 left (4) 17:10;39:2;69:9; 72:3 legal (6) 54:17;96:23;97:7; 102:2,7;199:1 legalistically (1) 228:23 legislation (1) 58:8 legislative (4) 54:6;89:17;101:3; 106:24 legislatively (2) 53:2;153:17 legislature (2) 39:17;101:14 lend (1) 89:7 lengthy (1) 19:2 less (5) 121:10;158:13; 165:23;212:13; 237:10 lesson (1) 237:14 letting (1) 170:8 lettuce (5) 125:2;135:19,19, 20,22 level (9) 19:13;31:8,13,22; 32:25;51:5,5;100:21; 120:16 levels (7) 30:20;31:4,6,7; 40:1;47:12;61:5 leverage (1) 28:6 Leyva (2) 15:13;16:12 liabilities (1) 151:21 liability (1) 53:9 liable (1) 123:11 liberate (1) 91:10 lidar (2) 166:3;184:25 lidars (2) 164:12;170:23 life (11) 23:4;41:6,16;44:13;</p>
	L			
	<p>LA (1) 57:7 labor (47) 6:14;10:13;28:8; 35:7;45:4;47:8;64:24; 72:5,16;95:24;96:5; 106:15,23;112:5; 128:24;129:5,11,15; 135:18;142:20; 143:22;144:8;145:3; 147:4,8,10,13;149:13; 151:1;152:13;156:8; 157:18;161:8;162:19; 166:21;172:10,15,15; 183:20;184:16; 206:16,24;207:23; 219:4;234:5;239:11; 242:6 labor-enhancing (1) 141:24 laborers (1) 195:10 labor-intensive (1) 126:17 Labor-replacing (2) 46:14;141:15 lack (7) 35:5,20;86:6; 114:15;142:19;158:5; 167:20 lacks (1) 56:2 lagging (2) 135:13;197:2 laid (1) 212:23 Lance (7) 47:23,25;48:1,7; 76:6,8,11 land (2) 105:7;190:6 landed (2)</p>			

48:15;123:24;131:13; 210:6;215:21;216:7,8 light (4) 170:24,25;171:3; 174:14 lightweight (1) 140:5 likelihood (1) 170:5 likely (4) 31:10;131:24; 138:23;142:22 limit (1) 80:6 limitations (3) 54:23;155:16;197:4 limited (8) 9:2;13:1;38:13,17; 155:7;218:10;239:25; 240:18 limited-term (1) 102:5 limits (3) 9:7;13:6;31:4 line (10) 8:21;12:20;51:6; 65:14;71:18;152:1; 188:4;192:13;209:21; 241:8 lines (4) 47:3;59:20;91:3; 209:6 lining (1) 13:22 link (7) 8:6;12:5;96:14,17; 103:20;216:17; 217:11 Links (2) 7:11;11:10 Lippincott (2) 47:23;76:6 liquor (3) 22:5,7,9 list (3) 80:1;237:9;245:17 listed (3) 9:11;13:10;77:9 listen (7) 8:17;12:16;13:15; 33:25;111:3;147:14; 175:2 listened (1) 81:6 listening (3) 28:23;97:12;234:2 listens (1) 180:12 literally (1) 206:7 little (28) 18:2,22;21:8;35:24; 42:14;50:5;62:24;	73:18;85:13;124:4,8; 126:7;127:25;129:12; 140:8;158:15;161:16; 170:18;179:2,5; 187:18,18;189:15; 196:23;212:10;225:7; 230:11;237:25 Little's (1) 210:8 live (8) 6:3;7:9,11;11:8,10; 45:13;97:3;122:17 live-camera (1) 205:5 livelihood (1) 136:22 liver (1) 185:9 lives (4) 28:7;42:25;160:2; 216:21 living (3) 158:1;213:6;225:11 LLC (2) 29:4;75:22 load (1) 130:21 Local (6) 36:14;44:25;48:17; 57:6;111:10;198:3 localization (1) 165:15 located (2) 37:4;157:8 location (2) 25:24;67:10 locations (1) 157:14 lock (1) 73:10 lockout (1) 199:19 logged (1) 109:11 logging (1) 163:8 logical (2) 94:23;150:8 logistics (1) 15:19 long (19) 17:15,16;36:5;44:8; 48:16;72:22;85:2,8; 89:1;99:4;122:25; 123:19;124:3;125:3; 152:5;189:16;196:7; 233:23,24 longer (12) 22:12;40:7;44:10; 48:13;63:12,22; 64:14;83:3,4,15; 159:17;176:13 longest (1)	87:14 look (48) 39:25;52:3;60:20; 68:24;74:2;75:15; 89:3;100:11;110:19; 112:5;121:22;124:12; 126:24;133:1,2,3; 134:17,19;143:21; 144:13;145:24; 146:21;151:10,11; 153:23;154:12; 158:20;161:17,18; 171:4,9,13,16;201:19; 208:22,24,25;209:23; 211:24;218:15,22; 225:4;227:15;229:9; 24;230:1;231:12,17; 238:11 looked (9) 23:1;53:8;61:3; 96:9;117:1,5;166:7; 223:16;238:6 Looking (29) 22:5;24:23;87:25; 113:20;117:9,11; 118:1;125:23;126:15; 131:23;132:11,20; 133:4;138:8;149:25; 154:14;156:23,25; 157:9;158:18,22; 162:4;166:4;192:4,6; 197:22;218:5;224:23; 229:17 looks (3) 106:6;109:18; 140:25 Los (6) 6:4,9;10:8;37:5,24; 40:16 lose (8) 101:4;111:20; 114:24;151:5,25; 188:24;190:17;239:1 losing (2) 92:14;189:19 loss (13) 40:21;105:9; 108:21;110:21,23; 111:5,7,14,24;118:9, 10,11,14 losses (1) 46:21 loss-prevention (1) 41:13 lost (12) 27:8,8;108:9; 113:25;114:17; 115:22;116:7;133:13; 165:14;188:23; 189:17;190:22 lot (50) 14:18;17:8,10,18; 18:1;19:2;20:13;50:8;	51:3;63:16;71:24; 72:18,18;74:10;97:2; 109:5;117:9;122:22; 123:5;138:17,25; 139:2;144:1;149:5; 150:24;151:14;155:7; 159:8;160:14;171:23; 174:10;182:1,17; 188:4,14;191:2,13; 192:7;197:14;208:2; 209:21;210:10;213:1, 11,14;215:17;216:16; 224:4;231:11;236:19 Lots (2) 141:3;180:7 loud (2) 41:1;50:5 love (10) 53:4;76:20;123:22; 169:2,4;170:17; 179:7,8;184:12;186:8 loved (1) 225:2 low (4) 31:8,22;53:12;61:5 lower (3) 30:19;31:3,6 lowered (4) 30:23;31:11;52:20; 54:2 lowering (1) 50:13 low-key (1) 58:2 low-light (1) 125:18 low-penalty (1) 54:18 low-risk (1) 32:19 Luckily (1) 41:1 lucky (1) 29:7 lunch (1) 23:11 lung (1) 185:9 Lyles (1) 107:9	206:12,12;210:2; 236:15 machinery (14) 28:17;108:6; 114:14;117:4;122:17; 125:16,17;167:11; 168:12;178:16;179:1, 15;180:1;207:10 machines (33) 46:14;63:6,23,25; 64:2,6,7;68:17;106:2; 109:6,11;111:11; 140:4;141:15,19; 142:7;146:6;156:13; 163:9;181:6,9,17,20; 194:15,16;199:13,15, 20;200:12;202:20; 209:16;211:10; 236:11 mailing (1) 245:17 main (7) 7:13;11:12;22:25; 69:20;87:20;114:13; 115:19 maintain (1) 154:3 maintained (2) 168:15;200:4 maintaining (1) 56:16 maintains (1) 188:22 maintenance (10) 30:9;163:8;166:16; 168:12;169:8;185:14, 17;199:20;200:8; 209:15 majority (3) 174:2;216:23;217:3 makes (5) 26:6;31:2;184:16; 185:11;197:18 making (19) 37:3;60:7;92:23; 113:20;133:22;134:2; 136:9;137:6;147:9; 154:21,21;158:23; 174:13;186:5;191:20; 209:2;212:2;216:5; 238:4 male (1) 22:18 malicious (1) 227:8 man (2) 40:22;132:8 manage (2) 31:5;199:15 managed (5) 41:10;189:13,14, 14;223:3 management (10)
				M
				M29 (1) 188:17 machine (28) 62:12;108:21; 109:15,16;111:10; 113:15,22,25;119:8; 156:25;169:9;170:1, 3,8,10;171:8,21; 181:16,18,22;194:18; 197:18;204:21,22;

6:10,12;10:9,11; 38:23;42:22;44:21; 103:10;106:15; 166:12 manager (6) 7:3;11:2;25:11; 40:24;70:20,24 manager's (1) 41:13 mandated (1) 153:17 mandates (1) 89:17 mandatory (2) 163:6,7 man-hours (1) 190:21 manner (4) 58:15;108:1;195:6; 199:16 manufacturer (6) 116:14;132:24; 139:12;180:25; 194:21;200:7 manufacturers (28) 26:3;61:15;63:19, 20;64:4,23;106:19; 108:5;117:15,17; 119:3;120:7,13; 150:18;152:14; 156:10;178:8,15; 182:4,12;183:16,19, 22;193:20;195:2; 219:5;225:3;239:10 manufacturing (3) 48:24;106:15;108:3 many (41) 9:5;13:4;15:10; 17:23;21:24;22:2; 26:3;33:5;35:8;36:3; 46:19;48:14;52:19; 58:9;59:17,21;63:5,8; 68:22;70:9;88:24; 90:10,10;98:2; 106:10;127:1;142:12, 13;144:19;156:13; 178:23;182:15,15; 191:9,11;199:11; 222:18,22;223:12; 227:3;232:19 map (1) 157:11 MARCH (5) 6:2;79:5,15;80:21; 102:17 marches (1) 124:14 Marilyn (1) 40:14 market (4) 108:25;109:1; 156:10;197:22 marketable (1)	162:5 masked (1) 236:8 materials (2) 7:6;11:5 Matt (6) 55:7;65:15,16,17; 76:13,14 matter (5) 43:25;123:18; 144:16,21;198:12 matters (8) 7:24;9:15,18,21; 11:23;13:20;77:8; 175:7 Matthew (3) 214:9,11,16 Matt's (1) 65:17 maximize (1) 195:7 maximum (1) 168:16 may (45) 8:2,6,9;5,7;12:1,5; 13:4,6,21;26:1;31:1, 17,18,22;32:18;34:24, 25;46:14;49:7,11; 50:15;73:18;79:16, 17;89:1,15;106:4; 115:23;141:14;146:3; 148:4;149:22;151:7; 165:8;178:13;181:21; 194:9;200:3;211:23; 228:17;233:23,23,24, 25;237:25 Maya (29) 24:21,22;29:2,12; 34:6;45:25;47:22; 48:2;49:6,23;55:8; 59:21;65:14,18;66:6; 67:25;69:9;72:3; 74:16;75:20;192:13; 195:18,23;198:17; 201:1;207:21;214:8; 215:2;217:23 maybe (17) 57:19;62:20;88:17; 89:1;129:11;138:22; 149:23;167:19; 170:16;188:16,19; 210:17,19;211:1; 226:21;235:19,23 maybes (1) 183:14 mean (58) 19:17;51:6;52:24; 54:7,8;60:22;81:13, 24;83:3;86:8,13,25; 88:6;91:20;94:18,22; 95:7,7,8,17,21,23; 96:21;97:11,14; 98:10,13;112:21;	118:11;121:16; 122:13;123:10,19; 138:10;142:15; 145:18;146:17;148:6, 8;150:8,19;151:9,9, 19;158:7;187:6; 219:25;225:21;226:6; 227:25;231:8;233:15; 234:12;236:2;237:17; 238:7;240:17;244:4 meaning (1) 152:19 meaningful (3) 25:16;202:22;207:4 means (5) 111:11;116:4; 120:18;137:2;189:8 meant (2) 59:13;240:16 measurement (1) 32:1 measures (5) 97:23,23;156:17; 162:21;194:12 mechanically (1) 64:2 mechanism (5) 28:11;111:23; 149:21;204:12,15 mechanisms (2) 90:8;232:11 mechanized (1) 107:12 medical (4) 19:8;31:16;47:16; 102:22 meet (5) 32:5;56:3;68:12; 213:25;225:17 meeting (65) 6:5,6,17;7:1,7,9,14, 21,23;8:2,9;4,9,10,11, 12,14;10:4,16,25; 11:6,8,13,20,22;12:1; 13:3,8,9,10,11;21:6; 33:13,14,19,20;34:18, 21;45:3;64:17;75:14, 17;77:4,6,7,9,11;79:8, 12,17,19,21;80:12; 102:13,14,16,17; 104:20;122:23;196:7; 221:5;237:18;240:11, 22;245:14,21 Meetings (6) 7:12;8:7;11:11; 12:6;176:14;230:18 member (12) 6:11;10:10;36:15; 37:22;77:11;224:16; 242:24;243:2,4,6,8,10 members (58) 6:9,12;9:5;10:8,11; 13:4;18:17;24:10;	25:9;30:1,6,10;35:23; 36:12;40:12;43:14; 44:4,25;46:10;58:12, 25;59:6;66:19;69:22, 22;72:8;75:1,5;77:16; 78:2;79:2;90:18; 102:4;103:23;104:3; 106:17;107:23,25,25; 119:22;128:24;135:8; 137:6;187:21;192:20; 194:1;196:6;198:25; 208:1;214:13;218:3; 222:18;224:7;225:16; 235:5;242:5;244:19; 245:9 memories (1) 95:2 mental (2) 37:18;42:11 mention (7) 62:3;68:7;89:19; 109:25;118:8;168:10; 181:25 mentioned (19) 33:17;61:19;62:10; 115:15;140:19; 170:20;176:9;178:14; 179:13;180:17,22; 181:15,23,25;182:13, 15,19;204:6;220:21 mentions (2) 34:21;62:5 Merced (1) 27:2 merchandise (1) 40:22 mercifully (1) 190:17 merge (1) 245:5 meshes (1) 14:12 met (4) 187:11;212:23; 213:12,21 meter (2) 31:23;32:25 method (3) 32:2,5;194:19 methods (3) 105:7,15;194:6 Michael (4) 75:24;107:3; 112:16;142:6 micrograms (3) 31:22;32:25;60:14 middle (1) 38:3 Midwest (1) 132:16 might (27) 21:22;23:8;43:19; 47:18;62:2;92:17,20;	94:23;98:15;131:4; 135:23,23;137:11; 139:7;141:24;144:9; 147:4,23;154:13; 161:7;162:18;170:16; 189:20;191:4;227:24; 234:25;238:15 Miguel (1) 37:23 Miiler (1) 112:16 Miüller (19) 107:3;112:12,14, 16;113:1,4;132:6,9; 142:6;156:2,2,3,5,19; 161:15;169:5;174:16, 18;218:2 Mike (7) 29:3,5,6,9,11;75:21, 23 miles (4) 68:10,10;205:2,2 military (1) 184:12 MILLER (2) 68:4;107:6 million (13) 14:10;26:17;36:23; 60:14;64:8;96:8; 188:18,19,23;189:19; 190:17;197:21;198:4 millions (4) 45:8,10;190:20,20 mind (12) 92:10;108:4; 126:12;159:6;170:21; 180:4,8;184:7; 211:16,17;212:9; 217:7 mindful (2) 161:13;200:24 mine (1) 122:9 minimal (2) 16:22;18:11 minimize (2) 74:8;156:11 minimum (3) 63:19;71:16;110:18 Minnesota (1) 174:2 minor (2) 18:10;166:15 minutes (7) 9:3;13:2;23:18; 104:11;172:4;176:11, 16 miscommunication (1) 226:21 mismatched (1) 62:14 miss (3) 19:20;28:21;85:25
--	---	---	--	--

<p>missed (3) 180:24;189:9;215:5</p> <p>missing (5) 26:14;144:3;187:9; 216:17;217:11</p> <p>mission (2) 194:7,11</p> <p>mistake (2) 57:25;169:25</p> <p>misunderstand (2) 96:20;174:22</p> <p>misunderstanding (2) 153:10;204:18</p> <p>misunderstandings (1) 144:10</p> <p>Mitch (6) 72:5,6;74:14; 207:22,24;225:19</p> <p>mitigating (1) 94:17</p> <p>mix (1) 138:21</p> <p>mixing (1) 146:10</p> <p>Mizuno (8) 107:9;131:4,9,22; 132:5;159:7;165:19, 22</p> <p>mobile (2) 32:8;51:15</p> <p>mobility (4) 147:16;160:8; 215:23;217:19</p> <p>mode (4) 35:9;130:8;203:7; 228:14</p> <p>Model (3) 63:3;67:19;99:19</p> <p>models (1) 63:21</p> <p>moderated (1) 104:17</p> <p>modern (1) 60:20</p> <p>modern-day (1) 46:20</p> <p>modified (1) 63:1</p> <p>modify (1) 220:16</p> <p>mold (1) 157:10</p> <p>moment (5) 41:14;92:10; 105:20;153:2;223:11</p> <p>Monarch (36) 107:19;128:20; 129:2,19;130:6; 131:11;137:25; 139:11,20;155:16; 187:10;201:3,12,14, 23;202:9;204:1; 205:13;213:2,4,6;</p>	<p>223:22;226:23;227:8; 229:2;230:13;231:16; 233:6,11,21,22;234:1, 11,20;238:7,23</p> <p>Money (18) 6:23;10:22;26:22; 78:4,7,9,11,13,15,17, 19,21;151:20;168:23; 169:18;209:20,22; 212:5</p> <p>monitor (1) 22:5</p> <p>monitoring (2) 185:16;206:9</p> <p>monitors (1) 180:23</p> <p>month (7) 16:17;30:14;34:20; 76:21;85:20,23;102:5</p> <p>months (9) 19:12,15,20;39:5; 88:20;212:13;224:5; 233:24;243:21</p> <p>more (99) 14:17;18:1,3;21:9, 13;23:25;24:7;30:25; 33:21;35:3,21;42:4; 50:18;51:10;53:23; 54:7;57:21;58:5;60:9; 61:2,4;65:11;69:4; 72:4;73:25;74:2; 79:11,18;81:24; 82:24;84:15;85:14; 86:9,14;87:1,2,12; 91:1,10;98:14,21; 104:25;107:6;108:16; 115:3;116:4,8,13,14; 118:21;121:10;141:1; 145:12;147:9,11; 148:4;152:3,13; 158:25;159:12,13,19; 161:21;164:14; 165:23;167:18; 169:24;170:18; 173:12,13;182:10,16; 183:20,25;186:5; 188:7;191:13;197:18; 199:20;201:2;203:21, 24;211:14;212:21; 213:14;215:25; 217:18,24;222:21; 223:7;224:9,10; 229:16;232:7;235:20; 236:12,19;244:11; 245:6</p> <p>morning (35) 6:3,5,18;16:21;16; 29:20;30:1;34:12; 35:4;36:4,12;38:14; 40:10,11,12;44:3; 46:10;48:5,10;50:2; 57:4,12;60:3;66:13, 22;69:16;70:10;</p>	<p>74:24,25;77:16;81:7; 95:18;126:9;186:21; 222:8;240:2</p> <p>MORSI (39) 24:19,24;25:2;29:3, 13,17;34:7;46:1; 47:23;48:3;49:7,11, 24;55:7,10;59:22,24; 65:15,19;66:7;68:1; 69:10;72:4;74:17,21; 75:21;76:1,6,13,17; 192:14;195:19,25; 198:18;201:2;207:22; 214:9;215:3;217:24</p> <p>most (31) 23:5;28:16;31:10; 35:17;67:15,16,17; 69:3;98:4;105:12; 112:7;116:16,17; 131:24;141:13;146:1; 150:8;151:4;152:23; 165:6,9;171:8; 184:17,20;185:7; 188:24,25;202:3,6,18; 205:15</p> <p>mostly (1) 200:11</p> <p>mother (2) 23:10;42:18</p> <p>motion (20) 77:20,24;78:5,23; 176:4,21;221:20,25; 222:2,4;229:22; 230:6;238:21;239:3; 240:6;241:10,15; 242:3,12,15</p> <p>Moutrie (5) 49:24;50:2,6;75:10; 90:6</p> <p>move (31) 29:12;45:24;48:2; 51:5;77:21;90:14; 92:14;105:11;106:7; 119:14;138:22;139:4; 148:4,16;168:20; 187:12;203:2;204:2, 16;205:11;206:13; 207:3,5;208:16; 214:4;221:14;230:23; 233:7;239:16;241:2; 245:6</p> <p>moved (1) 52:4</p> <p>movement (1) 202:14</p> <p>Moving (25) 25:23;51:3;93:18; 125:1,1,1;138:24; 143:16;153:19;154:7; 186:17,19;187:2,25; 202:13,25;205:9; 211:20;212:1;214:1, 23;220:20;225:15;</p>	<p>230:13;232:6</p> <p>Mowry (2) 7:4;11:3</p> <p>much (42) 24:14;28:25;33:21; 36:7;54:11;59:15; 61:12;63:10,24; 67:22;69:3,4,7;73:9, 17;74:3,4;75:18; 76:25;79:1;86:17,24; 87:12,15;90:12; 116:8;125:19;134:14; 141:1;144:24;151:20; 171:11;174:18; 176:24;177:1;183:23; 188:24;197:8;198:24; 209:15;211:24; 219:13</p> <p>multiple (15) 70:18;71:6,11;85:3; 91:25;93:19;167:15, 17;180:14;199:24; 205:17,19;212:12,12; 232:21</p> <p>multiplier (1) 27:20</p> <p>multitude (1) 31:9</p> <p>mundane (1) 121:3</p> <p>murdered (1) 37:24</p> <p>murders (1) 54:4</p> <p>muscle (1) 109:23</p> <p>must (12) 36:20;39:19,25; 67:8;81:23;90:3,11; 194:12,15;195:3,5,11</p> <p>mute (6) 7:16,19;8:25;11:15, 18;12:24</p> <p>myriad (1) 32:17</p> <p>myself (11) 27:22;36:20;40:17; 43:7,18,23;45:2;50:9; 216:18;218:7;224:23</p>	<p>15:18</p> <p>names (1) 37:11</p> <p>name's (2) 66:15;69:17</p> <p>NAPIER (3) 60:3,4;61:12</p> <p>narcotics (1) 44:14</p> <p>narrow (1) 101:17</p> <p>nation (2) 196:16;197:1</p> <p>national (1) 48:17</p> <p>nationally (1) 149:3</p> <p>Nations (1) 104:24</p> <p>nation's (1) 197:9</p> <p>native (4) 6:21;9:22;10:20; 124:2</p> <p>naval (2) 188:10;190:9</p> <p>Navy (2) 189:7;190:20</p> <p>Navy's (1) 190:1</p> <p>near (13) 7:7;8:14;11:6; 12:13;116:2;130:15; 135:24;156:24;166:3, 4;167:8;168:2;173:24</p> <p>near-accidents (1) 117:20</p> <p>nearly (2) 26:16;36:23</p> <p>near-miss (3) 117:19;142:8,23</p> <p>near-misses (6) 149:10,22;178:24, 25;203:18;210:10</p> <p>necessarily (3) 141:9;153:1;230:22</p> <p>necessary (12) 15:23;22:12;45:11; 63:13;79:23;84:22; 88:22;143:25;168:24; 220:16;229:22; 243:19</p> <p>need (116) 15:10,15;17:21,24; 18:9;20:25;21:1,2,9, 10;24:4;31:9;32:17; 36:18;42:7,11,24; 43:4,4,10;44:6;46:24; 47:14;50:17,18;51:6, 10,19;55:23;56:6; 57:14;58:25;60:9,24, 25;61:2;66:22;71:5; 72:17,24;73:3,8,11,</p>
N				
			<p>nailed (1) 225:14</p> <p>name (21) 8:18;12:17;14:2; 18:18;21:16;25:10; 36:10,14;40:13;44:4; 48:10;53:20;55:16; 57:4;61:14;126:20; 177:25;184:7;191:2; 192:22;215:10</p> <p>named (1)</p>	

<p>24,24;74:7;75:14; 83:15;84:22;87:18; 89:8,16;90:11;91:13; 96:20,24;101:7; 103:23;104:25; 105:10;115:9;125:14, 23;143:9;144:22; 146:7,7;147:15; 148:3,23;149:19; 153:16;155:5;163:10, 12,13;164:20,21; 167:19,22;169:18,20; 171:9;174:5,10; 179:18;180:10; 181:23;182:8,9,10,10; 184:22;185:12; 186:22;188:2;191:23; 192:8;199:15;205:21; 208:24;209:6;211:10, 15;212:20;214:20; 218:9;220:2,13,14; 231:16;232:15;236:8; 238:11;239:16;241:3</p> <p>needed (16) 16:16;23:21;26:11; 31:2;33:14;70:14; 83:2;85:15;86:4;89:2; 143:15;186:2;194:8, 11;212:20;222:11</p> <p>needing (1) 187:11</p> <p>needless (1) 134:21</p> <p>needs (25) 24:3;45:21;61:3; 69:2;74:2,3,4;81:16; 85:6;89:18;93:10; 118:10;152:2;168:17; 173:14;179:22;207:6; 211:11;212:24; 215:24;216:14,20; 218:9;223:3;230:14</p> <p>Neidhardt (7) 6:19;9:23;10:1,6, 18;103:5,8</p> <p>neighborhood (1) 37:5</p> <p>neighbors (1) 193:16</p> <p>neither (1) 39:10</p> <p>net (1) 136:14</p> <p>network (1) 110:9</p> <p>new (31) 19:24,24;20:18; 27:5,6;31:3;32:13; 56:1;84:14;102:4; 103:6,20;109:7; 128:4;132:15;157:3, 4,23,25;158:2,3; 159:2;160:5;161:23,</p>	<p>25;162:4,5;185:15; 189:6;198:8;202:11</p> <p>newly (1) 102:11</p> <p>news (3) 14:14;15:3;210:4</p> <p>next (75) 16:17;27:5;29:2,3, 12,13,16,17;30:14; 34:6,7;37:20;39:6; 44:2;46:1;47:22,23; 48:2,3;49:6,8,23,24; 55:7;59:11,17;65:15, 18,19;66:6,7;67:25; 68:1;69:10;70:24; 72:4;74:15,21;75:20, 25;76:1,5;79:7,12,13; 80:5,19;102:5,6; 103:1;126:2;139:18, 25;140:4,7;145:5; 157:13;166:15;174:1; 195:18,19,24,25; 198:17,18;201:3,19; 203:3;207:21,22; 214:8,9;215:2; 243:21;245:14</p> <p>nice (4) 18:6;34:3;37:5; 230:17</p> <p>Nicol (3) 46:1,4,11</p> <p>night (4) 38:14;42:19; 174:11;200:21</p> <p>nights (1) 86:16</p> <p>nine (2) 64:3;173:20</p> <p>nineteen (1) 39:13</p> <p>NIOSH (3) 32:5;61:5;96:4</p> <p>nitrate (1) 105:9</p> <p>nobody (8) 134:6,9;141:4; 151:2;156:22;157:15; 189:13;191:12</p> <p>nobody's (1) 148:8</p> <p>noise (3) 26:6;28:16;68:18</p> <p>Nola (6) 6:10;10:10;141:8; 147:24;173:3;179:13</p> <p>non-automated (1) 202:1</p> <p>none (4) 78:1;103:13; 208:25;242:17</p> <p>non-emergency (1) 80:19</p> <p>non-healthcare (1)</p>	<p>44:9</p> <p>noninteractive (2) 7:11;11:10</p> <p>nonprofit (1) 215:12</p> <p>nor (1) 121:19</p> <p>normal (5) 61:1;138:1,4; 203:11;205:1</p> <p>normally (3) 130:9,11;206:15</p> <p>Northern (1) 75:3</p> <p>Nos (1) 77:17</p> <p>Notably (1) 53:2</p> <p>note (4) 75:5;84:1;139:14; 221:1</p> <p>notes (3) 33:14;77:2;162:20</p> <p>notice (2) 13:23;60:15</p> <p>noticeable (1) 52:21</p> <p>noticed (3) 22:6;79:5,15</p> <p>Notices (5) 7:12;8:7;11:11; 12:6;93:20</p> <p>notification (1) 205:3</p> <p>notified (1) 133:14</p> <p>notifies (1) 205:22</p> <p>notify (1) 205:10</p> <p>November (1) 193:23</p> <p>nowadays (1) 123:6</p> <p>nowhere (1) 44:21</p> <p>nozzles (1) 200:1</p> <p>nuanced (1) 121:18</p> <p>nuclear (1) 193:9</p> <p>number (14) 32:14;38:24;50:7; 60:24;102:9;111:2; 121:20;138:19;140:4; 141:17;171:6;199:15; 209:12,17</p> <p>numbers (5) 30:25;59:12; 121:25;122:22; 123:20</p> <p>numerous (3)</p>	<p>115:16;184:10; 185:6</p> <p>Nunez (1) 37:23</p> <p>Nurses (2) 66:8,16</p> <p>nuts (1) 105:4</p> <p style="text-align: center;">O</p> <p>Oakland (1) 15:20</p> <p>objective (1) 30:18</p> <p>objects (1) 170:24</p> <p>observation (2) 35:6;144:6</p> <p>observations (3) 142:4;147:25; 219:25</p> <p>observe (1) 130:2</p> <p>observed (2) 148:13;149:22</p> <p>observing (1) 167:24</p> <p>obstacles (1) 203:20</p> <p>obvious (1) 156:23</p> <p>Obviously (7) 88:22;91:1;120:15; 124:13;140:5;142:10; 185:25</p> <p>occasion (1) 37:7</p> <p>occasions (1) 180:14</p> <p>Occupational (23) 6:6,13,15;7:24,25; 9:15;10:12,14;11:23, 24;13:21;24:9;36:13; 37:1;40:12;43:13; 55:18;88:23;90:2; 102:21;106:16; 107:18;242:6</p> <p>occur (9) 58:9;71:12;94:23; 117:20,21;127:21; 184:20;197:15; 215:24</p> <p>occurred (1) 143:11</p> <p>occurring (3) 40:2;68:16;214:19</p> <p>occurs (1) 152:20</p> <p>ocean (1) 189:12</p> <p>October (1) 27:15</p>	<p>off (35) 16:1,3;22:5;39:9; 42:12;48:8;55:22; 103:24;108:2,3; 115:4,20,24;116:20; 120:18;123:8;133:20; 160:17;167:15;168:5, 7,14;169:1;170:8; 181:17,21;189:10; 190:1,3;200:1; 210:1,11,17,19;224:22; 235:8</p> <p>offending (1) 58:6</p> <p>offer (2) 141:24;221:20</p> <p>offered (5) 42:13;80:3;184:10; 213:4;218:25</p> <p>offering (1) 219:3</p> <p>offhand (1) 121:25</p> <p>office (2) 41:14;60:20</p> <p>officer (3) 6:18;10:17;13:23</p> <p>officers (2) 41:7;184:19</p> <p>officer's (1) 221:3</p> <p>official (1) 213:23</p> <p>often (13) 23:22;26:8;38:12; 39:3;53:20;58:2;89:7; 100:7;114:24;135:10; 136:13,17;222:21</p> <p>oftentimes (1) 38:18</p> <p>old (3) 157:23;180:20; 183:4</p> <p>onboard (2) 170:2,11</p> <p>once (12) 39:14;56:24;71:6; 75:24;119:10,20; 137:11;167:15; 171:18;185:3;205:18; 207:12</p> <p>One (114) 9:13;16:18;18:7,21; 19:21;20:7;21:13; 22:14,19;23:6;35:22; 37:7;45:21;52:8;53:5; 55:8;59:22;61:6;64:8; 69:20;70:2,19,21; 71:17;72:4,15;74:15; 76:13,21;79:13;80:3; 81:11;82:6,9;84:14; 86:18,20;87:6,19,23; 88:2;92:1,21;93:19;</p>
--	--	--	---	--

<p>95:9;96:22;98:16,21; 99:3;105:20;108:5, 23;111:8;112:20; 113:8,24;116:4; 120:2;122:15;126:1; 128:2,9,14;129:9; 136:1,20;137:11,11; 138:22;139:12;140:2; 142:24;144:25;147:9; 148:9;149:15;151:17; 155:25;156:1,20,22, 24;163:3,20;165:16; 167:9,16,18;169:8; 170:1;184:17;185:7; 188:20;189:20;190:8; 191:2;193:10,17; 196:17;201:3;206:3; 210:11;211:25; 212:12;215:5;218:8; 220:1,3;221:9; 224:24;225:24; 231:13;236:3;239:4</p> <p>onerous (1) 33:21</p> <p>ones (8) 35:20;43:19;54:3; 67:15;71:24;74:18; 170:22;203:3</p> <p>one's (1) 162:2</p> <p>ongoing (2) 67:20;110:1</p> <p>online (2) 80:11;217:22</p> <p>only (33) 14:16;28:11;34:21; 38:12;41:21;43:3; 44:12;47:14;54:11; 81:24;132:18;135:16; 140:2;152:17,19,20; 157:14;167:1;169:13; 170:22;171:2;190:12; 193:15;203:2;204:9; 218:19;219:10; 223:20;224:24,25; 230:22;233:5;239:19</p> <p>onto (2) 130:21;181:3</p> <p>open (9) 21:10;35:12;43:5,5; 117:4,7;172:12; 216:11;219:20</p> <p>opened (2) 22:9;147:8</p> <p>opening (2) 40:21;147:4</p> <p>operable (1) 56:17</p> <p>operate (6) 63:14;114:2; 144:18;174:1;190:3; 206:7</p> <p>operated (10)</p>	<p>106:3;141:6;170:8; 179:1;188:20;191:3, 10,11,20,23</p> <p>operates (1) 108:22</p> <p>operating (13) 125:16,17;131:11; 133:5;151:15;170:1, 3;185:22;202:10; 205:1;206:15;227:11; 236:15</p> <p>operation (11) 58:3;148:13,15; 161:11;165:25; 191:22;199:16; 202:22;207:13,14; 236:4</p> <p>operational (6) 31:3;163:5,5,13; 169:13;206:14</p> <p>operations (19) 30:9;32:9;109:18; 138:17,18;148:22; 179:14;200:15; 201:22,25;202:3,7; 203:7,16,23;204:3; 207:8;234:20;235:1</p> <p>operator (31) 25:21,24;62:9,11; 63:21,22;116:5,12; 127:3;130:19;135:25; 156:12;160:16; 166:13;167:10,13,16; 179:6;181:17;191:20; 204:4,22;205:6,7,19, 21,24;206:5,11;211:6, 10</p> <p>operators (17) 26:5,10,14;28:16; 68:12;114:16;115:20; 116:4;159:16;166:25; 178:19;181:16,19; 182:12;184:23; 199:11;204:20</p> <p>opinion (1) 42:2</p> <p>opportunities (9) 25:14;27:4,21; 100:10;186:4;194:4; 198:6;222:25;223:14</p> <p>opportunity (37) 25:20;27:19;28:3,6, 21;43:24;49:18; 61:17;65:3;66:14; 67:22;68:5;72:9;83:4; 96:11;118:2;119:5, 21;123:25;127:18; 129:14;155:18;184:3; 195:15;197:7;201:10; 208:3;215:18,18,23; 217:18;227:10; 230:21,22;235:16; 239:13;240:9</p>	<p>opposed (9) 30:17;47:2;137:5; 151:23,24;166:4; 232:7;243:23,24</p> <p>opposition (1) 35:25</p> <p>optic (1) 157:6</p> <p>option (2) 92:20;180:19</p> <p>Orange (1) 57:6</p> <p>oranges (3) 148:1;154:22,23</p> <p>oranges-to-oranges (1) 154:15</p> <p>orchard (4) 113:13;156:22; 159:2;180:2</p> <p>orchards (1) 162:25</p> <p>order (12) 6:7;69:24,24;86:4; 99:17;153:19;180:9; 182:19,24;215:21,25; 229:22</p> <p>orders (1) 80:20</p> <p>ordinarily (1) 131:18</p> <p>Oregon (1) 132:16</p> <p>organization (4) 55:19;69:21; 104:24;196:18</p> <p>organizations (4) 159:9;173:7,10,11</p> <p>organized (4) 152:25;153:3,4; 223:3</p> <p>organizer (1) 55:17</p> <p>original (1) 166:24</p> <p>OSH (1) 30:3</p> <p>OSHA (7) 6:4;36:23;154:16, 17;172:3;175:16; 184:10</p> <p>OSHSB (4) 7:13;8:7;11:12; 12:6</p> <p>others (10) 15:15;65:13;66:20; 95:19;111:22;125:7; 148:5;225:4;239:11; 241:9</p> <p>other's (2) 136:19;163:4</p> <p>otherwise (7) 55:18;115:12; 117:22;150:3;202:4;</p>	<p>229:20;230:7</p> <p>ourselves (5) 23:19;38:9;39:4; 161:7;238:25</p> <p>out (76) 6:5;13:14;16:10; 17:4;22:21;35:19; 37:8;41:9;46:14;54:6; 56:12;63:11;65:6; 73:2,20,23;74:1;82:2; 88:8;97:19;104:3; 110:8,9;111:1;115:8, 17;121:4;122:19; 123:16;129:22; 132:22,23;134:10; 135:22;137:11;138:2; 144:9;146:20,22; 148:7,8;150:2;151:7; 152:15;153:5;155:10, 25;157:3,22;159:22, 25;164:8;166:4; 168:3;172:10;178:2, 5;180:24;189:14; 190:6;192:7,8;198:2; 200:1;204:11;208:22; 210:20;212:23; 213:18;218:16;219:6; 236:14;237:23;238:5, 12;239:5</p> <p>outbreak (1) 79:24</p> <p>outdoor (3) 88:1;99:2;100:9</p> <p>outreach (2) 84:13;206:16</p> <p>outside (7) 44:19,20,22;52:10; 119:18;223:1;234:11</p> <p>outstripping (1) 101:24</p> <p>over (42) 15:17;19:1;44:13, 23;64:7,8,9,10;75:10; 85:3;87:16;88:1,3,14; 102:6;103:9;105:2; 106:25;107:11;124:7; 141:25;142:7;149:6; 157:23;161:25; 169:21;173:22;193:1; 197:21;208:14,14; 210:1,1,4;211:4,4; 216:5;228:10;233:22; 234:5;240:13;243:21</p> <p>over-a-hundred-degree (1) 125:12</p> <p>overall (3) 30:17;166:12; 236:14</p> <p>overcome (1) 46:20</p> <p>overdue (1) 36:6</p> <p>over-emphasize (1)</p>	<p>89:22</p> <p>over-extraction (1) 105:8</p> <p>over-protection (1) 31:24</p> <p>oversight (1) 128:16</p> <p>over-stretched (1) 223:4</p> <p>own (6) 42:15;95:16; 120:19;155:10,11; 210:6</p> <p>owner (1) 160:20</p> <p>owners (3) 20:12;119:8;181:5</p> <hr/> <p style="text-align: center;">P</p> <hr/> <p>pace (1) 183:7</p> <p>package (3) 34:23;93:7,22</p> <p>packer (1) 217:3</p> <p>packing (1) 200:18</p> <p>page (7) 7:13;11:12;33:13; 96:16;99:21;210:7; 237:9</p> <p>pages (4) 17:15,16,19;88:3</p> <p>paid (2) 15:18;37:24</p> <p>Painting (2) 75:4;161:7</p> <p>palatable (1) 81:24</p> <p>Palo (3) 124:3,4,7</p> <p>pandemic (2) 57:24;58:1</p> <p>panel (36) 49:7,18,21;64:18; 65:25;103:15,19; 104:15,15,18;106:17; 107:23,25;112:10; 119:18;141:23;162:8; 172:6,14;176:21; 177:24;178:10,10,12; 186:15;192:20; 201:18,19;217:24; 222:18,23;223:23; 231:10;232:18; 238:22;239:8</p> <p>panelists (2) 128:15;196:6</p> <p>panels (2) 223:5;224:11</p> <p>paper (1) 14:7</p>
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<p>paradigms (3) 109:7;121:22; 205:15</p> <p>paralyzed (1) 27:24</p> <p>parameters (3) 134:2;135:3;207:11</p> <p>pardon (1) 41:19</p> <p>parents (1) 23:11</p> <p>parked (1) 22:22</p> <p>part (22) 15:7;16:20;25:13; 57:7;71:21;74:7; 81:20;87:14;101:9; 109:4;128:16;133:4; 151:4;154:6;158:19, 24;161:9;179:11; 186:9;203:1;236:10; 245:4</p> <p>partially (1) 190:12</p> <p>participants (3) 13:20;103:22;139:9</p> <p>participating (7) 7:14;8:3;11:13; 12:2;75:16;192:6; 216:3</p> <p>particular (5) 75:12;123:3; 190:10;197:8;233:10</p> <p>particularly (6) 30:6;51:14;84:14; 100:13;114:16; 127:19</p> <p>parties (4) 16:5;118:20;145:3; 237:22</p> <p>parting (1) 82:18</p> <p>partly (1) 199:13</p> <p>partner (1) 196:11</p> <p>partnering (1) 196:20</p> <p>partnerships (1) 27:1</p> <p>parts (7) 7:22;11:21;60:14; 67:12;109:16;121:9; 132:24</p> <p>party (1) 111:18</p> <p>Paskins (2) 7:3;11:2</p> <p>pass (5) 45:17;56:8;71:13; 84:14;243:16</p> <p>passed (4) 15:13;34:16;87:15,</p>	<p>20</p> <p>passes (1) 78:23</p> <p>passing (1) 70:4</p> <p>passionate (2) 162:14,15</p> <p>passionately (1) 162:9</p> <p>parents (3) 108:8;114:22; 163:25</p> <p>past (7) 79:5;98:13;120:12; 156:25;179:18;189:5; 193:23</p> <p>patented (1) 106:21</p> <p>path (6) 26:2;115:24;117:2, 3;150:8;195:13</p> <p>pathway (2) 116:24;239:23</p> <p>pathways (1) 196:14</p> <p>patience (1) 201:11</p> <p>patients (1) 44:17</p> <p>patrol (1) 33:17</p> <p>pause (1) 213:14</p> <p>Pavilions (1) 21:21</p> <p>pay (1) 20:17</p> <p>paying (7) 22:14;37:9;158:3, 10;209:14,15,22</p> <p>peas (1) 174:3</p> <p>peers (1) 165:6</p> <p>PEL (3) 19:7;31:11,20</p> <p>Penaloza (1) 37:23</p> <p>penalties (4) 52:20;53:11;54:1,3</p> <p>pending (1) 223:12</p> <p>people (102) 15:3;16:10;17:9,10, 24;18:8,10;22:1,7,12; 24:17;44:24;51:1; 59:18;60:11;68:17; 80:17;82:1;85:17; 87:2;88:18;89:15,16; 90:9;97:17,24;99:6,6, 24;109:11;121:4; 122:10,20;131:14,15; 132:1;133:18;134:3;</p>	<p>135:1;138:17;140:14; 143:12;144:19,20; 146:4,9,10;148:18,23; 149:21;151:5,16,19, 25;152:4;153:4; 156:23;157:20,21,24; 158:11;159:1,24; 161:19,21,23;162:1,3, 5,16;166:1;173:6; 175:16;179:11; 180:12;182:2,10,15, 22;185:2;202:2,10, 18;209:17;210:24; 216:24,25;218:21; 219:12;220:14;223:8, 13;227:6,12,15;228:2, 12;229:9;235:22; 237:17;239:11;245:1</p> <p>people's (1) 138:13</p> <p>per (10) 9:3;13:2;31:22; 32:25;60:14,14;96:8; 158:3;162:2;184:18</p> <p>percent (16) 26:12;57:17;59:6; 104:25;105:3;120:17, 18,19;158:2;165:17; 170:5;197:10,11; 203:24;206:13,14</p> <p>percentage (1) 68:9</p> <p>perception (1) 163:22</p> <p>perfect (9) 65:1;108:11; 179:25;180:3;181:4, 18;183:21;216:2; 230:25</p> <p>perfectly (1) 165:10</p> <p>performance (3) 128:17,18;194:15</p> <p>performed (2) 138:1,9</p> <p>performing (4) 45:14;107:14; 138:4;194:16</p> <p>perhaps (3) 121:23;180:18; 182:21</p> <p>perilously (2) 60:16;61:10</p> <p>period (26) 17:20,22;18:25; 21:11;38:13;49:18; 50:18;75:13;79:6,15; 83:3,5,15;92:2,17,19; 93:3,5,25;96:9; 100:12;104:18; 153:12,22;155:7; 219:18</p> <p>periods (1)</p>	<p>174:14</p> <p>permanent (2) 102:2,11</p> <p>permissible (2) 31:4;80:5</p> <p>permission (1) 16:24</p> <p>Perpetrators (1) 22:18</p> <p>person (23) 8:14;12:13;19:18, 19;22:15;23:20;52:1; 65:12;85:12;89:20; 123:17;126:21; 132:19;133:17; 134:10;161:23; 167:14,21;170:1,2; 210:3;211:11,12</p> <p>personal (9) 25:12;45:3;50:17; 70:16;80:14;150:11; 202:20;210:6;221:6</p> <p>personally (3) 50:20;57:18;231:5</p> <p>person-hours (1) 86:8</p> <p>personnel (3) 7:5;11:4;102:16</p> <p>person's (1) 167:22</p> <p>perspective (4) 63:2;70:16;156:16; 163:15</p> <p>pertaining (2) 9:15;194:3</p> <p>pertinent (2) 233:19,25</p> <p>pest (1) 157:8</p> <p>pesticide (7) 130:13;134:7,11, 13,14;191:20;199:16</p> <p>pesticides (2) 138:15;139:24</p> <p>Petition (15) 34:14;102:20,25; 103:2;127:9,12; 152:20,23;153:9,19; 204:6;212:10,11,16; 214:2</p> <p>petitioner (1) 142:16</p> <p>petitioners (1) 62:17</p> <p>Petitions (9) 7:12;8:7;11:11; 12:6;62:4,6;218:24, 25;245:4</p> <p>pharmacist (1) 44:16</p> <p>pharmacists (1) 44:22</p> <p>pharmacy (5)</p>	<p>41:9;44:5,11;45:8, 15</p> <p>Phase (2) 204:2,2</p> <p>phases (2) 128:2;203:3</p> <p>phone (9) 8:20,25;12:19,24; 45:25;59:20;89:21; 91:3;171:14</p> <p>phones (7) 7:16;11:15;21:14; 59:21;60:1;114:24; 123:7</p> <p>phonetic (1) 45:5</p> <p>Phylmar (1) 29:18</p> <p>physical (3) 37:6;57:19;197:15</p> <p>physically (5) 38:4;53:9,12; 132:19;197:18</p> <p>pick (3) 76:22;130:21; 166:12</p> <p>picked (1) 74:18</p> <p>picks (1) 124:19</p> <p>picture (3) 124:6;140:2;154:24</p> <p>pictures (1) 171:7</p> <p>piece (10) 82:4;93:2;109:13; 154:11;163:12;166:9; 189:1;206:4,5;233:5</p> <p>pieces (3) 50:7;167:11;187:10</p> <p>piggyback (1) 159:5</p> <p>pillar (2) 96:22;97:9</p> <p>pilot (13) 122:4,5;159:25; 169:2;188:20;189:1, 2,14,17;190:13,18,22; 210:9</p> <p>piloting (2) 116:25;135:16</p> <p>pilots (4) 137:2;160:1; 188:22;190:5</p> <p>pioneers (1) 193:2</p> <p>pipe (2) 160:18;161:5</p> <p>pit (1) 151:16</p> <p>place (34) 7:16;11:15;24:12; 38:22;40:2;43:15;</p>
---	--	---	--	--

61:21;65:1,6;73:14; 84:17;90:8;111:23; 126:16;127:3,21; 129:4;132:18;135:15; 153:13;163:10,13; 165:16;168:8;170:10; 180:1,3;182:21; 183:21;192:3;220:25; 221:20;238:2;244:3	pm (3) 22:4;40:20;43:4	portable (1) 19:8	precisely (1) 232:5	79:20
placement (1) 27:4	podium (4) 8:14;12:13;36:10; 177:25	portion (3) 9:3;13:2;104:20	precision (2) 134:12;193:3	prevention (10) 39:16;40:21;43:21; 66:20;67:7,14,20; 98:5;99:12,16
places (6) 52:18;68:22; 138:24;145:13;207:7; 233:16	point (56) 35:19;37:19;81:22; 82:17,21;94:20; 95:14;97:1;114:23; 123:11;131:4,22; 134:5,5,23;146:13; 147:2,3;150:16; 151:6;154:5,11; 155:1;158:24;161:16; 162:7;166:8;167:5; 168:3,4;171:19; 175:12;179:18;188:1; 189:20;202:2;209:18; 221:22;222:15;224:2, 8,13;229:8,23,25; 230:3,4;232:1,4,12; 234:4;238:4,19; 243:16,18;244:6	pose (2) 56:20;116:1	preclude (2) 153:3;223:8	preventive (2) 97:22,23
plan (4) 19:13,13;67:14; 222:3	pointed (1) 144:9	poses (1) 56:14	precludes (3) 223:5;230:13,15	prevents (1) 25:25
plane (9) 95:11,12;121:17; 189:2;210:12,13,17, 21,25	points (6) 51:13;95:4;108:18; 144:5;165:22;203:1	position (5) 20:7;102:11,12; 122:10;211:9	precursor (1) 204:13	prevents (3) 22:19;60:9;62:4
planes (1) 121:3	poison (1) 236:5	positioned (2) 48:22;197:25	predominantly (2) 107:1;134:6	previously (1) 147:5
planned (1) 227:20	poisoning (1) 79:5	positions (4) 26:11;102:2,6; 107:8	prelude (1) 232:14	price (1) 37:24
planning (1) 30:14	poisonings (1) 178:21	positive (1) 198:10	premature (3) 176:3;199:8;214:4	primarily (1) 159:8
plans (3) 19:14;137:21; 154:16	police (12) 13:23;23:12;41:7; 44:22;53:16,18,20; 54:1,22;71:2;98:7; 184:19	possibility (2) 92:5,6	premise (1) 157:17	primary (4) 30:22;171:20; 197:22;202:19
planter (1) 140:10	political (1) 57:5	possible (11) 30:15;56:1;70:15; 71:15;77:16;112:7; 125:20,22;134:2; 192:3;242:8	preparedness (1) 42:2	principal (5) 6:19;7:2;10:18; 11:1;103:6
plants- (1) 135:19	poll (1) 57:16	possibly (4) 99:17;123:1; 176:21;218:16	pre-rulemaking (8) 92:12;153:11,21; 155:6,19;180:17; 220:22,25	principle (1) 55:20
plaque (1) 124:8	pollution (1) 105:10	post (2) 34:21;96:13	prescribed (1) 94:21	prior (5) 8:15;12:14;19:9; 196:22;203:3
play (1) 96:23	Poly (1) 158:17	posted (2) 80:11;103:1	presence (1) 191:4	priorities (3) 85:17,18;218:9
playing (1) 160:2	pool (2) 147:4,8	post-incident (1) 39:22	present (12) 6:9,17,24;10:8,16, 23;38:11;46:17,17; 48:14;51:17;228:16	prioritize (3) 54:2,3;241:1
plea (1) 45:2	POPE (3) 184:2,8,8	postings (1) 102:10	presented (1) 227:9	prioritized (1) 187:1
please (34) 7:19;8:17;11:18; 12:16;14:2;17:3,21; 18:1,5;36:11;48:6; 55:12;65:18;77:14; 78:1,25;80:23;93:7; 96:19;103:9;105:19; 106:4;114:6;126:5; 129:17;169:3;177:25; 178:1;180:16,16; 184:6;218:15;242:23; 245:16	P-o-p-e (1) 184:8	postponed (1) 35:2	presents (1) 46:18	prioritizes (1) 193:14
pleased (3) 103:5;125:7;214:18	popular (1) 185:7	postponing (1) 35:10	preserved (1) 9:20	priority (5) 101:25;133:2; 218:11;219:8;241:8
plenty (3) 210:6;233:15;238:5	population (5) 105:1;144:1;194:9; 216:7;220:3	potential (15) 19:21;31:13,21; 32:19;38:2;63:6; 116:11;118:9;121:15; 134:3,11;141:3; 186:5;195:7;242:7	president (1) 45:4	Priscilla (1) 36:14
plethora (1) 145:1		potentially (5) 99:11;118:14; 150:5;199:17;210:16	pressing (1) 105:4	private (1) 198:8
plug (1) 121:14		pouring (2) 209:20;212:5	presumes (1) 19:6	privately (1) 153:3
		poverty (2) 197:10,10	pretend (1) 144:23	privilege (1) 108:12
		power (1) 193:9	pretty (11) 9:8;13:7;41:1; 66:21,23;83:1,11; 95:17;111:15;122:12; 124:8	proactive (1) 64:20
		powerful (2) 149:7;164:14	prevalence (1) 57:13	proactively (1) 63:11
		PPE (2) 31:16;102:18	prevent (7) 43:16;71:7;74:6; 79:4,14;199:13,16	probably (27) 65:5;73:11;95:18; 96:2;103:1;121:17; 123:11;151:18;152:7; 153:22;163:5;164:10; 165:9;166:11,13; 175:13;190:15,21; 199:19;210:24;234:2, 22;237:11,13;238:5; 243:18;244:6
		practices (2) 110:19;111:8	preventable (1) 55:21	problem (22) 23:23;52:17;53:8,
		precious (1) 188:25	Preventing (1)	

<p>23,24;54:17;73:12; 87:5;97:9;115:1; 116:18;157:19,20; 158:5;166:14;231:5, 7,13;233:13;241:16; 242:21;244:5 problematic (1) 51:4 problems (8) 54:5,6,11;87:20; 88:9;115:9;157:13; 159:23 problem-solving (1) 28:12 procedural (3) 9:19;103:17;226:7 procedures (4) 31:15;154:2;163:9, 13 proceed (6) 9:12,13;13:11; 89:16;104:15;200:23 process (52) 9:19;10:3;14:6; 23:9;33:8;42:12; 54:12;65:8;74:12; 81:16;83:3;85:2,6,8; 87:1;88:15,19; 107:13;135:8,14; 144:24;150:9;153:9, 9,20,21;159:14; 165:1;186:18,20; 187:2,8,13;189:11; 199:4,8;204:10,14; 207:5;212:9;219:11; 220:20;221:9,15; 222:13;223:2;225:6; 230:15,24;234:4,6; 238:24 process-confused (1) 237:25 processes (3) 81:21;82:19;88:24 produce (2) 104:25;105:2 produces (1) 197:8 producing (1) 63:19 product (5) 82:2;140:14;163:3, 15;193:5 production (3) 48:21;197:2;200:5 productive (1) 147:10 products (1) 193:1 professional (2) 44:16;154:7 professionals (1) 35:17 Professor (3)</p>	<p>144:9;158:15; 164:24 professor's (1) 134:5 profoundly (1) 54:16 program (5) 32:23;99:12,16; 100:11;101:18 programmed (1) 116:24 programming (1) 116:23 programs (2) 100:8;136:15 progress (1) 204:8 prohibitive (1) 168:19 prohibits (1) 202:8 project (1) 162:24 projects (2) 196:20;245:4 promise (2) 46:15;126:24 promised (1) 34:19 promoted (1) 17:12 prompt (2) 118:25;162:20 promulgated (1) 17:5 pronouncing (1) 120:3 Prop (2) 52:19;54:6 proper (2) 168:21;200:8 properly (8) 23:15;24:4;64:25; 81:15;163:14;168:15; 171:21;220:16 property (1) 113:18 proponents (1) 208:14 proposal (2) 33:21;36:6 proposals (3) 7:23;11:22;88:14 propose (1) 244:20 proposed (13) 30:4,7,12;34:1; 47:10;75:7;77:13,18; 79:4,13;101:13; 195:2,12 proposing (1) 146:22 proprietary (1)</p>	<p>117:14 prosperity (1) 215:25 protect (26) 14:8,8;15:3;16:8; 24:7,12;43:16,22; 45:17;47:13;56:16; 57:2;58:23,25;73:15; 90:9;115:15;135:15; 137:4;156:23;168:8, 25;181:16;193:15; 236:8;243:25 protected (1) 36:20 protecting (4) 115:14;136:11; 154:1;193:12 protection (5) 13:25;15:15;31:16; 67:20;219:8 protections (7) 31:12;44:9;67:5; 113:10,23;157:15; 170:10 protective (3) 17:1;67:3;221:6 protects (1) 195:6 protocol (1) 45:6 protocols (3) 58:18,19;95:3 proud (1) 147:20 provide (19) 8:13;9:24;10:1; 12:12;20:8;32:10; 39:20,23;69:21;74:4; 85:13;86:3;91:7; 194:7;201:20;202:23; 215:25;230:18; 234:17 provided (7) 75:11;128:14; 182:2;194:23;222:21; 229:3;239:12 providers (2) 47:17;193:20 provides (3) 41:24;205:4;216:2 providing (2) 6:20;10:19 provisions (2) 51:16;73:1 proximity (3) 135:24;174:7;202:6 PRR (5) 29:18;30:2,6,9;33:4 prudent (2) 125:23,25 public (80) 6:11;7:22,23;8:2,5, 6,9,10,12;9:2,3,5,6,9,</p>	<p>12,14;10:3,10;11:21, 22;12:1,4,5,8,9,11; 13:1,2,4,5,8,11;17:16, 19,21;20:1;37:7; 49:12,18;55:22; 71:10;76:19;77:4,10, 12;79:7,10,12,17; 81:18,25;83:5;85:8, 22;86:11,16;92:2,16, 19;93:3,5,6,18,23; 95:1;104:19;107:6; 119:7;174:23;175:3; 176:20;177:17; 186:15;187:6;219:18; 223:7;224:12;230:19; 231:1,2 publications (1) 14:15 public-facing (1) 74:9 publicize (2) 14:16;15:9 publicly (1) 153:4 public's (1) 93:23 publish (1) 95:25 published (1) 30:21 pull (3) 105:19;139:9;149:3 pulled (7) 37:8;105:20;134:8; 173:18;200:19; 212:21;227:14 pulling (4) 135:21;181:1,2,5 pulls (1) 19:7 punched (1) 37:12 punished (1) 52:23 punishment (1) 53:24 purchase (1) 113:20 purpose (4) 77:6;131:25; 181:21;227:5 purposely (1) 148:16 purposes (1) 238:18 push (5) 39:9;63:24;108:7; 161:10;230:10 pushed (1) 198:2 pushes (1) 81:13 put (38)</p>	<p>16:10;17:4;38:5,8; 52:24;61:20;65:6; 90:8;97:4;113:15; 131:24;133:10;134:1; 148:7;150:20,23; 179:14;180:1;181:20; 182:7,23,24;183:15; 187:23;190:22;193:9; 202:2;209:7;213:14; 227:17;229:21; 238:20;239:2,5; 240:6;241:20;242:1,3 puts (1) 93:14 putting (11) 64:19;113:12; 135:22;136:9;178:10; 180:22;181:19; 183:12;192:20;225:7; 231:11</p>
Q				
				<p>quadrupled (1) 37:2 qualified (3) 47:16;121:19;163:4 quality (3) 159:24;193:10; 215:21 quantities (1) 207:2 quantity (1) 88:4 queue (9) 8:5,6,9;12:4,5,8; 24:17;29:2;45:24 quick (6) 152:7;154:10; 185:18;210:7,8; 244:24 quickly (11) 14:5;41:11;51:4; 72:10;88:16;105:20; 109:22;118:8;132:7; 169:7;172:8 quit (1) 37:13 quite (16) 53:16,21;118:5; 144:8;147:7;149:4; 172:13,16;185:15; 200:14;221:1;222:20; 232:20;239:7,9,12 quote (5) 26:20;33:1;43:10; 140:11;202:12</p>
R				
				<p>race (1) 121:5 racism (1)</p>

37:3 racist (1) 37:11 radar (2) 182:8;185:1 radars (3) 164:9,12,13 radius (1) 202:21 raised (4) 27:17;52:9;127:16; 197:21 ramp (1) 189:7 ran (6) 22:21;41:2;70:21; 130:7,8;228:16 range (4) 46:18;105:22; 180:5;208:9 ranging (1) 203:23 rapid (2) 53:16;183:7 rapidly (1) 53:18 rapid-response (1) 38:21 rarely (1) 38:24 rate (3) 121:20;197:10,10 rather (2) 140:25;186:3 Raven (7) 49:8;192:15,22,25; 193:5;195:4,12 re (1) 164:8 reach (5) 31:22;32:3;73:2; 104:3;172:10 reaches (1) 197:11 react (2) 109:22;111:19 read (1) 20:4 reading (1) 212:22 READS (2) 10:6;20:3 ready (10) 16:17;22:23;93:22; 143:6;156:15;199:23; 224:13;232:9,13; 239:24 real (21) 25:16;28:12;51:11; 56:19;61:6;82:18; 84:22;115:22;118:2, 4;131:13;132:22; 147:1;149:10;152:7;	169:7,22;172:7; 178:19;221:18;227:5 reality (1) 73:19 realize (1) 123:5 realizes (1) 33:4 real-life (2) 42:3;143:12 really (77) 13:18;15:8;17:5,22; 19:1;44:17;51:4,13; 52:2,3,17;54:7;59:12; 68:23;70:11;71:20; 73:7,16;77:3;81:7,13; 82:11;84:18,18; 87:10,13;90:15; 108:18,20;112:20; 118:19;119:20;123:6, 7,20;124:23;126:15; 132:2,10;133:19; 134:2,16;136:25; 138:20;139:10;146:4; 150:1,13;151:2,13,22; 163:2;164:16;170:14, 25;171:19,23;172:1, 10;173:9;175:6,7; 176:22;182:17; 202:19;208:12;212:3; 214:18;216:11,13; 218:10;229:7;230:19, 23;231:8;238:8;244:7 realtime (1) 185:17 Reaper (2) 188:17,18 reason (6) 13:25;73:2;135:15; 159:21;179:16; 208:20 reasonable (8) 31:5,18,21;156:17; 162:21;167:7;221:18; 234:13 reasons (8) 35:4;48:25;68:25; 113:8;123:2;144:2; 220:3;222:6 reboots (1) 205:8 recall (2) 53:20;71:7 recap (1) 62:24 receive (5) 7:23;11:22;23:17; 77:8;245:17 received (2) 102:20;228:15 receiving (1) 55:15 recent (3)	93:12;96:5;152:23 recently (4) 45:1;57:16;202:12; 213:17 recess (1) 103:14 recipient (1) 196:10 recognize (6) 25:13;89:10;110:1; 132:21;199:11; 232:17 recognized (2) 22:19;99:25 recognizes (1) 63:14 recommendations (1) 93:8 recommended (3) 62:16;183:17,18 reconvening (1) 18:25 record (10) 56:2,15;68:23;77:5; 119:11;168:11;178:1, 25;184:7;224:21 recording (2) 178:25;245:22 records (2) 122:16;145:21 recovery (1) 39:22 red (2) 51:6;157:9 reduce (2) 46:15;125:19 reduces (3) 134:15;185:23,24 reducing (4) 30:18;134:10,14; 186:3 redundancy (2) 165:4;166:6 redundant (2) 165:2;166:11 re-enter (1) 27:25 refer (1) 189:7 referring (2) 20:5;205:13 refine (1) 94:21 refined (1) 150:10 reflect (2) 201:24;218:13 reflected (3) 7:21;11:20;30:12 reflecting (1) 171:5 reflects (2) 73:15;219:8	refresher (1) 204:9 refreshing (1) 95:2 reg (12) 14:11,20,25;15:7; 16:16;17:5,16,17; 18:3,9;51:4;54:13 regain (1) 28:1 regard (2) 75:7;200:6 regarding (8) 9:15,17;32:12; 72:12;73:6;77:9; 86:20;214:19 regardless (1) 31:12 regards (1) 110:21 region (7) 68:8;196:15;197:8, 23,24,24;198:9 regional (2) 18:20;196:13 region's (2) 27:2;198:3 register (1) 40:25 regs (4) 14:5;15:9,12;18:9 regular (3) 71:22;142:13; 245:14 regularly (1) 79:22 regulate (1) 57:10 regulated (2) 20:1;34:19 regulation (42) 16:9;19:2,16;20:2, 6;25:8;30:21;51:22; 61:21;62:7,10,19; 65:6;80:19,21;81:17; 84:14;85:20,24;86:8; 87:14,20;88:1,92:15; 93:15;96:21;97:1; 99:2,9;127:12; 134:18,25;179:16; 180:10,20;182:6; 183:3;194:6;195:5; 218:12,14,16 regulations (32) 14:7;18:23;19:25; 61:25;62:9,14;83:13; 84:23;87:19;89:9,18; 92:7;93:13;94:16,16, 19;98:3,5;100:14; 102:23;110:17;112:7; 125:24;128:5;141:21; 153:16;174:5;197:4; 199:10;220:17;234:8;	240:13 regulation's (2) 20:19,25 regulators (6) 112:6;117:17; 119:7;145:4;164:23; 213:11 regulatory (14) 7:4;11:3;29:18; 35:13;54:12;63:13; 66:15;73:13;79:23; 81:12;83:13;153:24; 164:21;204:14 reintroduce (1) 103:5 reiterate (2) 51:13;126:11 rejected (3) 212:12,15;214:2 rejoin (2) 103:24;177:14 related (11) 52:13;108:24; 128:10,22,24;129:16, 18;173:20,21;211:5; 212:11 relates (1) 114:14 relating (1) 117:6 relations (2) 45:5;107:4 relationship (1) 98:15 relative (1) 169:8 release (1) 186:1 released (2) 45:1;193:1 relevant (8) 67:17;119:6;125:9; 189:25;194:12; 206:24;221:11;242:5 reliability (1) 193:8 reliable (2) 114:15;225:15 reliance (1) 238:7 reliant (2) 115:12,16 relied (2) 57:10;199:23 rely (3) 47:14;180:12,15 relying (2) 136:18;142:20 remain (2) 129:4;199:3 remaining (1) 22:16 remains (1)
---	--	---	---	--

<p>46:21 remarkable (2) 170:25;171:16 remember (18) 8:25;12:24;70:19; 71:1,2;113:11;124:5; 126:20;127:15; 136:13;139:3;157:18; 158:1;169:10;197:16; 222:23;228:5,7 reminded (1) 42:22 reminder (1) 38:6 remote (15) 8:11;12:10;24:24; 25:24;62:9;115:20; 116:3,5,11;139:9; 178:19;204:20;205:6, 19,23 remotely (5) 7:1;10:25;116:6; 167:23;188:20 removal (2) 32:10;179:25 remove (5) 26:9;28:16;64:2; 68:17;191:1 removes (1) 184:22 removing (3) 68:15;125:5;185:12 Renee (1) 55:16 repair (2) 30:9;166:16 repeatedly (1) 116:16 repetitive (1) 179:24 replace (2) 157:24;188:25 replaced (1) 162:2 replacement (3) 137:7;203:9,10 reply (1) 92:8 report (6) 23:13,14;96:3,5; 129:13;221:3 reporting (1) 91:3 repository (1) 95:16 represent (12) 18:19;57:8,9;61:15; 75:2;108:14;166:21; 168:1;173:8,9; 192:22;197:6 representation (1) 193:19 representative (12)</p>	<p>6:10,12,14,15,16; 10:9,11,13,14,15; 108:3;127:6 representatives (4) 21:7;35:24;67:11; 106:14 represented (1) 64:18 representing (5) 48:11;85:12; 106:18,23;173:11 represents (3) 106:25;107:5; 196:19 request (9) 30:10;75:12;97:6; 127:20;142:16; 183:22;202:12; 203:19;226:2 requested (1) 224:1 requesting (3) 45:6;64:23;183:19 requests (3) 9:21;77:12;92:1 require (3) 97:5;111:11;153:18 required (7) 30:24;31:1,11; 32:16,23;39:20,23 requirement (5) 19:17;32:6,10;33:1; 178:16 requirements (6) 30:8;32:1;110:18; 164:21;194:24; 199:19 requires (10) 19:9,10,11,18,19; 38:1,8;100:21; 194:19;202:25 requiring (2) 19:7,8 research (6) 27:1;98:3;107:11, 14;157:3;194:4 resilient (3) 111:24;118:11,14 resiliently (1) 118:23 resolve (1) 58:5 resolved (1) 139:5 resource (1) 221:2 resources (21) 27:1;35:5,14,20; 53:23;85:16;89:8; 91:1,10;101:24; 107:16;115:3;186:25; 200:24;218:10; 222:11,14;240:1,3,17,</p>	<p>18 respect (5) 59:3;74:11;238:6; 241:12,14 respectfully (3) 75:12;158:7,9 respirator (2) 191:21,24 Respiratory (1) 31:16 respond (13) 34:1;38:18,22; 39:24;42:10;90:3; 93:10;137:8;167:22; 174:25;208:4,7;232:3 responding (1) 31:7 response (10) 19:13;31:1;38:25; 53:16,20;87:23; 122:2;209:5;236:22; 237:19 responsibilities (3) 38:16;39:11;193:7 responsibility (6) 38:7;41:18;90:8; 91:7;212:6,7 responsible (3) 24:1;156:12;200:7 rest (3) 35:11;132:14; 161:11 restart (2) 80:9;116:7 restarted (3) 85:6;115:23;116:1 restarting (2) 114:17;115:21 restaurant (1) 27:23 restrictions (1) 221:2 result (5) 20:25;31:8,10,24; 230:20 resulted (1) 200:17 resulting (1) 203:11 results (3) 109:4;127:13; 203:24 retail (17) 24:11;36:20;40:14; 43:14,23;44:12; 52:13;57:8,9,11,14; 59:8;69:23;70:17; 90:22;91:4;95:9 Retailers (4) 54:22;70:21;95:15, 22 retaining (1) 189:9</p>	<p>retaliation (1) 127:19 retial (1) 70:10 retired (1) 17:10 retrain (2) 160:5;161:1 retrained (1) 159:16 retraining (4) 160:14,15,24; 161:13 retrofit (3) 106:10;184:4;200:6 retrofits (1) 106:20 retune (1) 166:3 returned (1) 70:22 reverse (1) 202:13 review (12) 19:2,11,18,18,20; 67:13;80:4,7;183:5,6; 186:8;198:14 reviewed (1) 19:14 revised (1) 33:19 revision (1) 35:25 revisions (5) 19:11;34:22;60:5; 63:13;75:7 revisit (1) 212:24 revisiting (1) 196:24 revolve (1) 238:23 reworked (1) 231:16 rid (1) 208:24 right (130) 18:8;20:2;22:23; 25:4,5;29:16,21,23, 24;34:11;41:8;46:8, 17;48:6;50:3,4;55:6, 11;59:19;61:1;65:12, 23;66:5,11;68:11,12, 25;69:15;70:25; 71:11;73:4;74:1,9,20, 23;75:25;76:10,18; 77:19;79:1;84:5; 91:23;99:7;101:2,21; 103:13;104:9,10; 109:11;119:2;120:3; 121:4,7,15;124:15; 128:12;129:10; 131:17,20,25;133:1;</p>	<p>134:8,11;135:6; 137:22;139:16,23; 140:12;142:20; 145:11;146:1,16; 152:4,7;157:8,9; 158:13;159:7;160:15, 23;161:18,19,21; 165:21;167:13,20; 169:9,25;172:1; 177:19,19;178:5,6; 179:17,22,24;181:4, 19,20;183:12;192:18; 195:11;196:4;201:8; 210:20;212:1,2; 213:15;214:14;215:9, 17;216:3;218:1; 219:7,17;221:1,20; 226:2;233:5,8; 235:21;236:17;238:3, 10;240:6;241:25; 243:20;244:18; 245:10,13 rightfully (1) 225:9 rights (3) 9:20;39:22;226:7 rise (1) 58:23 rises (1) 100:21 revised (2) 55:24;56:2 risk (21) 31:13;38:5;42:25; 52:24;56:19;82:15; 92:13;93:15;94:17; 119:16;133:5,19,20; 134:15,21;135:25; 136:6;173:6;190:22; 194:6;208:24 risk-free (2) 208:19,22 risks (5) 26:5;46:16;52:14; 134:3;211:7 Rite-Aid (2) 37:22;40:16 road (6) 16:9;27:24;92:14; 117:10;183:14;214:1 roadmap (1) 64:3 roadside (1) 32:20 Rob (2) 75:10;90:6 robberies (3) 70:19;71:6,12 robbery (1) 71:1 Robert (2) 49:24;50:1 robot (2)</p>
---	--	---	--	---

<p>157:4;211:7 robotic (1) 157:13 Robotics (5) 106:12,20;111:16; 134:14;193:24 robots (1) 125:3 robust (1) 81:20 robustly (1) 118:22 role (3) 74:9;193:5,9 roles (1) 220:6 roll (2) 78:2;242:22 rolled (1) 189:10 rollover (2) 133:16;141:18 rollovers (3) 25:22;178:21; 183:10 Romans (1) 72:21 roof (1) 20:18 roofer (1) 20:11 Roofing (7) 18:19,20;20:8,12, 17,22;21:6 room (4) 13:24;59:18;61:8; 146:24 rooms (1) 209:8 rotors (1) 170:23 roughly (1) 26:23 Roundtable (1) 29:18 rule (6) 31:7;32:7,15;33:4, 8;34:2 rulemaking (18) 79:3,4,11,14;80:1, 9;92:11;102:21; 119:20;143:16; 152:21;154:8;204:10, 14;214:1;220:20; 245:3,5 rulemakings (1) 93:12 rumors (1) 213:11 run (17) 41:5;63:6;79:16; 113:16,17;120:18; 123:17;124:11;138:3;</p>	<p>150:18;151:16;155:4; 173:22;181:6;189:16; 204:3;206:6 running (8) 23:24;160:17,23; 161:2,4;180:2; 228:13;236:12 runs (3) 79:6;140:10;162:24 rural (5) 114:16;115:1,3; 194:4;199:1 rush (1) 13:24 Russian (2) 188:17;189:2</p>	<p>16,17,18;36:4,13; 40:13;41:14;42:21; 43:13,15;45:14,20; 46:16,19;47:6,11; 55:18;56:8;57:11; 61:25;66:24;68:15, 25;71:9;88:23;90:2,7; 96:22;102:3;103:6,8; 105:18;106:16; 107:17,18,21;108:8; 111:23;114:18,20,22; 115:13,18;116:9,21; 117:18;118:7,10; 122:16;134:18; 135:25;136:14; 141:20,24,25;154:1,4, 7;162:8,9,18,20,24, 24;163:2,3,5,5; 166:25;167:2,13,16, 17;168:21,24;169:1; 179:4;184:14;190:19; 191:17;193:5,7,10,14, 18,23;194:3,5,9,14; 197:13;199:9,12,22; 200:3;204:25;205:18, 22;206:4,22;207:7, 17;208:13,15;211:9, 21;212:2,4;215:16; 234:8;240:13,25; 242:6 safe-use (1) 64:10 sailors (1) 189:11 salad (1) 168:2 Saldivar (4) 69:10,13,16,17 same (27) 22:16,20;23:5,28:5; 31:6;53:7;54:2;63:2; 76:20;104:7;124:23; 146:3;148:11;159:15; 160:4;161:3;163:11; 167:18;173:7;177:9; 194:16;197:9;198:3; 205:10;208:21; 209:16;234:24 Sarah (5) 6:23;10:22;78:1; 242:17,19 SASAKI (2) 21:16,17 satellite-guided (1) 193:3 save (3) 41:6;190:18;209:21 saving (2) 189:16,17 saw (4) 114:2;116:24; 124:5;155:4 saying (21)</p>	<p>13:15;21:3;51:7; 85:6;93:7;98:24; 106:9;113:14;129:25; 131:13;134:20; 147:14;152:5;155:20; 157:12;182:10; 204:19;219:3;231:19; 237:20;239:15 SB (2) 101:12,16 scanning (1) 22:13 scarcity (1) 105:13 scared (2) 41:15;182:4 scarring (1) 185:9 scary (3) 23:3;72:18;208:20 scenario (5) 22:20;53:11; 156:18;167:1;206:8 scenarios (1) 156:16 schedule (2) 80:11;163:8 scheduled (5) 102:6,17;166:15; 176:7;245:15 scheduling (2) 82:24;102:7 schools (1) 95:8 science (1) 219:9 scientific (1) 194:18 scope (1) 30:24 Scott (2) 68:1,3 screen (4) 78:3;84:9;121:15; 146:16 script (1) 44:16 se (1) 162:2 Sea (2) 188:18;190:11 searched (1) 41:9 season (2) 86:1;109:4 seat (3) 62:12;122:5,13 seatbelt (1) 150:23 seatbelts (1) 150:20 second (15) 9:13;22:15;36:25;</p>	<p>77:1,22,23,24;78:5; 115:19;129:9;191:14; 208:12;213:8;242:14, 15 secondary (2) 26:5;139:23 Secondly (2) 47:9;56:4 seconds (1) 171:10 secretary (1) 102:7 section (13) 7:13;8:7;11:12; 12:6;20:5;79:25;80:6; 186:8;196:25;198:14; 200:14;219:1;242:8 sector (3) 82:1;95:1;107:1 sectors (1) 82:11 secure (6) 109:6;114:15; 115:12;116:16,17; 141:22 secured (5) 26:16;46:16; 141:21;199:6,14 security (23) 22:6;24:4,5;38:10, 12,14,16;41:19,19,20; 43:2,5;45:6;58:20; 80:16;90:10;108:19, 23;109:18;110:13,18; 120:20;184:13 Seeing (1) 103:13 seek (1) 143:20 seeking (1) 102:22 seem (3) 60:11;73:13;140:22 seemed (1) 201:17 seems (13) 32:7;56:1;81:23; 83:14;94:23;115:6; 138:12;143:8;145:9; 187:8,25;209:5; 232:23 sees (2) 195:12;205:5 seizures (1) 185:10 self-diagnosis (1) 111:13 self-learning (1) 41:25 self-preservation (1) 41:15 self-propelled (1) 207:10</p>
	S			
	<p>Sacramento (2) 52:14;245:15 sacrifice (1) 127:3 saddened (1) 54:25 safe (43) 37:14,16;38:20; 47:1,12;56:10,16; 64:12,15;70:3,3,3; 91:7;111:12,22; 113:7,9,22;119:15,15; 127:4;133:2,18; 134:2;144:22;156:17; 167:9;175:5,21; 183:10;186:2;189:22; 202:5;208:15;209:1; 211:13;212:8;213:15; 225:14;230:2;236:14, 16;244:2 safeguard (1) 47:11 safeguards (2) 61:20;133:10 safely (8) 28:19;39:24;43:9; 44:23;63:15;178:17; 190:15;242:9 safer (17) 21:23;70:8;133:12, 21;137:7;170:11; 175:5,8,15;182:25; 184:16;185:11;186:5; 193:24;210:2;218:14; 244:2 safest (3) 25:22;112:7;192:3 Safety (141) 6:6,15,19,22;7:2,24, 25;9:16;10:14,18,21; 11:1,23,24;13:21; 14:10,24;19:23; 20:10;24:1,3,9,11; 25:19;34:8,13;35:7,8,</p>			

<p>sell (1) 193:11</p> <p>semi-automated (1) 191:6</p> <p>semi-autonomous (1) 190:24</p> <p>Senate (2) 101:13;107:8</p> <p>Senator (2) 15:13;16:12</p> <p>sending (1) 212:16</p> <p>sends (1) 205:3</p> <p>senior (6) 6:22;10:21;102:3; 103:7;107:17;240:25</p> <p>sense (10) 31:2;51:17;68:20; 159:18;162:18;185:2; 211:7,14;229:20; 230:6</p> <p>sensible (1) 112:7</p> <p>sensitive (3) 32:3;167:13;226:8</p> <p>sensitivities (1) 119:3</p> <p>sensor (7) 106:10;111:18; 164:20;166:8;168:17; 200:20;206:4</p> <p>sensors (25) 56:21;111:10; 157:7;163:22,25; 164:1,7,7,15,18; 165:5,8,10,24;166:3, 4;168:13;169:13; 170:9,21,23;171:20; 199:22,25;200:3</p> <p>sent (2) 23:13;80:6</p> <p>sentence (1) 88:2</p> <p>sentences (1) 20:5</p> <p>separate (2) 138:3;148:3</p> <p>September (1) 40:20</p> <p>serious (6) 73:8,17;115:7; 116:8;166:14;200:16</p> <p>serious-injury (1) 107:22</p> <p>seriously (3) 23:12;59:2;189:13</p> <p>serve (4) 42:8,9;189:21; 216:7</p> <p>serves (1) 107:13</p> <p>service (2)</p>	<p>27:22;131:24</p> <p>services (4) 6:20;7:3;10:19; 11:2</p> <p>session (3) 104:14;177:22; 245:10</p> <p>sessions (2) 42:13,14</p> <p>set (15) 82:19;85:18; 115:17;119:12; 121:23;129:3;151:12; 160:3;166:2;167:15; 232:13,17;233:19; 238:8,24</p> <p>setting (10) 44:11;67:4;88:23; 136:5;166:2;186:16; 187:6;230:15;237:8; 239:22</p> <p>setup (1) 151:18</p> <p>seven (5) 65:6;151:16;187:3; 190:6;220:12</p> <p>Seventeen (1) 34:16</p> <p>seven-year-old (1) 146:18</p> <p>several (16) 48:20;60:13;61:18; 82:22;88:20;97:23; 98:1;120:8;149:1; 182:1;186:21;188:21; 189:11;201:18;203:1; 229:1</p> <p>shaking (1) 22:7</p> <p>shall (2) 162:9;202:14</p> <p>share (20) 25:15;28:21;64:6; 85:7;96:12;111:3; 114:5;118:2;119:6, 14;145:6;149:4; 172:17;182:5;203:5; 218:21;221:21;223:9, 14;239:13</p> <p>shared (4) 23:4;26:3;203:14, 19</p> <p>sharing (5) 118:3,4;171:16; 202:25;232:7</p> <p>sharp (1) 117:7</p> <p>sheets (1) 84:18</p> <p>shelves (1) 73:23</p> <p>shied (1) 213:24</p>	<p>shift (4) 23:6;37:17;40:15; 150:22</p> <p>shock (2) 41:12;97:20</p> <p>shoot (2) 76:23;164:7</p> <p>shooter (2) 41:3,10</p> <p>shooters (1) 58:22</p> <p>shooting (1) 53:17</p> <p>shop (2) 44:5;45:3</p> <p>shoplifter (3) 37:7,25;70:21</p> <p>shoplifters (3) 22:2;38:2;42:9</p> <p>shoplifting (7) 39:24;52:8,53:21; 59:5;70:18,19;71:12</p> <p>shops (2) 73:10;102:24</p> <p>short (1) 239:22</p> <p>shortage (1) 161:8</p> <p>shortest (1) 47:18</p> <p>shortly (2) 81:10;102:8</p> <p>short-term (1) 32:4</p> <p>shot (4) 40:23;43:19;73:20, 21</p> <p>shovels (1) 124:19</p> <p>show (11) 35:24;37:20;39:1,5; 71:3;123:20;128:18; 140:18,23;145:18; 204:17</p> <p>showcasing (1) 206:19</p> <p>showed (2) 41:8;96:7</p> <p>shower (1) 32:10</p> <p>showers (1) 19:8</p> <p>shown (1) 199:25</p> <p>shows (2) 140:2;243:22</p> <p>Shupe (62) 6:18;10:17;49:9,13, 15,16;76:9;92:9;93:4; 101:4,7,22;103:22; 104:2,17,21,22;106:6; 112:10,13,15;113:2; 114:6,10;117:8;</p>	<p>119:16;126:1,5; 128:12;131:1,3; 135:9;137:18;139:5; 140:13,16,24;141:3; 153:8;155:1,22; 156:1,4,6;171:25; 172:22;176:6,9,18,20; 177:13,16;180:17; 184:6;220:24;234:3; 240:10,15,20,24; 244:16;245:2</p> <p>shut (2) 111:21;166:14</p> <p>shutoff (1) 106:1</p> <p>shuts (1) 114:19</p> <p>sic (2) 224:17;236:23</p> <p>side (5) 53:3;117:1;146:16; 147:9;185:8</p> <p>sides (1) 121:5</p> <p>sight (1) 120:19</p> <p>signal (14) 46:21;108:9; 110:21,23;111:5,14, 24;114:16;115:12; 116:7;118:9,11,14; 178:16</p> <p>signals (5) 114:17,19,24; 115:18,22</p> <p>signatories (1) 75:6</p> <p>signature (1) 171:4</p> <p>significant (9) 31:15;35:3;116:1; 136:2;168:13;186:19, 25;187:8;197:6</p> <p>significantly (6) 30:23;105:23,25; 140:6,16;155:3</p> <p>signing (1) 103:20</p> <p>silica (2) 102:24;199:17</p> <p>silicosis (2) 79:20,23</p> <p>similar (9) 16:19,19;31:1;63:7; 88:5;105:5;154:13; 193:9;222:23</p> <p>simple (4) 16:20;17:1;121:1; 160:6</p> <p>simply (11) 35:16;46:20;47:2; 68:11,15;193:9; 204:11,23;205:9;</p>	<p>206:20;207:15</p> <p>single (8) 37:7;40:18;42:17; 156:12;166:8,9; 172:17;245:5</p> <p>site (11) 16:24;60:23;91:10; 115:20;116:22;124:6; 141:20,22;167:24,25; 235:18</p> <p>sites (11) 19:8;46:16;51:15; 128:19;166:21,23; 235:11,12,15,20; 236:1</p> <p>sits (1) 62:11</p> <p>sitting (5) 68:11;125:11; 160:21;170:1,2</p> <p>situated (1) 67:16</p> <p>situation (12) 39:6;53:14;90:1; 95:10;134:10;137:9; 145:7;167:19;168:22; 181:20;234:23; 238:23</p> <p>situations (22) 23:16;38:23;39:4; 42:4,7;58:20;89:12, 15;118:23;143:12; 154:20;164:5,14; 168:9;171:12;179:23; 184:23;191:16; 223:24;227:8,15; 235:22</p> <p>six (8) 15:17;16:16;19:12, 14,20;40:6,15;85:3</p> <p>six-pack (1) 70:23</p> <p>size (2) 16:18;18:7</p> <p>sizes (1) 33:2</p> <p>skeptical (1) 200:10</p> <p>skill (2) 158:25;162:5</p> <p>skills (7) 28:6,15;69:24; 147:15,17,17;160:3</p> <p>skip (1) 76:11</p> <p>slide (3) 139:18,25;140:7</p> <p>slides (4) 105:19;106:7; 139:6,10</p> <p>slightly (1) 106:12</p> <p>slip (2)</p>
--	--	---	--	--

<p>8:13;12:12 slow (1) 202:14 slowly (4) 8:22;12:21;200:24; 212:1 small (9) 23:22;26:23;60:21; 70:23;84:9;86:13; 105:23;111:2;209:12 smaller (1) 50:14 smart (3) 123:6,7;164:16 smash/grabbing (1) 22:20 smashing (1) 150:17 Smith (10) 7:2;11:1;34:7,8,10, 12,13;51:21;57:4,5 smooth (1) 190:11 snow (1) 179:25 Snowplowing (1) 179:24 Sabanto (2) 184:3;225:4 SoCalCOSH (3) 55:19;56:6;66:19 so-called (1) 115:13 societal (1) 194:5 society (1) 124:15 software (6) 108:7;116:20; 166:10;205:12;206:8, 14 soil (3) 32:20;60:12,15 soils (1) 60:13 solar (1) 63:25 sold (1) 132:25 solely (1) 171:3 solid (1) 83:13 solution (2) 41:22;219:3 solutions (1) 71:25 solved (1) 26:3 solving (1) 87:5 somebody (10) 20:9;33:17;84:8;</p>	<p>126:9;142:24;158:10; 221:21;236:6,15,16 somehow (2) 205:7;210:2 someone (9) 33:14;85:23; 122:13;136:22;137:8, 9;160:22;167:21; 227:18 someone's (2) 133:9;136:21 something's (1) 123:18 sometime (1) 40:19 Sometimes (5) 38:10,17;136:13; 209:14,14 Somewhere (3) 124:4;152:2;234:25 son (4) 133:13,15,18; 146:18 sonar (1) 185:1 soon (5) 30:15;55:25;70:14; 71:14;214:1 sophisticated (1) 109:18 Sorry (32) 24:21;27:12;45:5; 53:19;55:8,10;59:24; 78:19;85:11;96:5; 113:5;125:16;126:6, 20;129:17,25;131:6,7, 9;149:15;150:6; 165:20;166:18; 172:23;177:5;180:24; 208:1;224:25;231:20; 243:1,12,12 sort (17) 51:8;89:17;119:3; 121:19;128:4;138:13; 150:9;154:13;176:4; 202:22;204:15;206:1; 212:16;213:23; 221:14;226:3;237:15 sorting (1) 200:18 sorts (3) 210:4;211:5,22 sound (5) 31:1;119:10; 122:12;179:3;221:18 sounds (3) 98:15;122:11; 140:12 South (1) 132:15 Southern (3) 15:20;55:17;57:7 soy (1)</p>	<p>174:3 space (4) 106:1;139:12; 141:1;155:9 spaces (1) 32:8 Spanish (6) 6:21;7:10;9:22; 10:6,20;11:9 Spanish-speaking (1) 10:2 speak (46) 7:17,18,19;8:18,22; 11:16,17,18;12:17,21; 21:18;25:7;40:17; 43:24;52:12;54:8; 56:12;57:12;59:18; 61:17;65:25;68:6; 72:9,10;79:11,18; 84:1;108:15,16; 110:25;112:18; 118:11,12;127:18,22; 129:14;143:23,25; 172:7;177:24;195:15; 196:21;205:15;206:2; 208:3;224:23 speaker (18) 8:13;9:3;12:12; 13:2;53:19;59:3,17; 104:1;106:4;112:23; 129:24;140:11,14,22; 178:4;219:19;227:1; 228:9 speakers (15) 6:21;8:11,12;9:6, 23;10:20;12:10,11; 13:5;53:5;55:6;60:9; 65:12;69:4;176:23 speaking (5) 25:11;70:4;144:2; 173:6;226:20 special (5) 7:2;11:1;91:18; 99:17;100:11 special-emphasis (1) 100:8 specialist (1) 66:16 specific (21) 16:24;18:9;57:20; 67:9,10;99:9;100:14; 111:5;127:20;135:14; 144:25;147:21; 152:18;153:19; 162:23;166:23;174:5; 194:23;218:25; 229:16;235:15 specifically (16) 18:3,10,23;30:8; 69:23;71:16;77:12; 89:13;127:7;142:10; 181:1;204:4;205:13; 208:5;222:9;228:1</p>	<p>specifics (2) 140:12;144:16 speed (5) 62:2;87:4;205:2; 210:17,19 spend (4) 27:18;165:9,17; 171:22 spends (1) 190:20 spent (4) 50:21;123:23; 125:10;216:19 spit (2) 37:10;57:20 spitballing (1) 87:10 spite (1) 223:25 split-second (1) 210:14 spoke (6) 53:19;126:21; 130:10;147:24;182:1; 220:8 spoken (3) 51:13;69:4;89:7 spores (1) 199:17 spot (1) 22:22 spots (1) 164:25 spray (4) 68:18;169:20,21; 200:1 sprayed (1) 73:22 sprayer (8) 109:3;134:8,8,9; 139:20;157:14; 163:11;180:1 sprayers (2) 105:23;141:16 spraying (6) 134:7;138:15; 181:2,8;193:3;236:5 sprays (1) 157:14 spring (2) 202:4;235:1 Sprout (1) 41:24 SRIA (2) 20:16;33:20 SSE (2) 102:5,11 stabbed (1) 73:21 stable (1) 115:12 stacking (1) 15:21</p>	<p>stacks (3) 111:3,4,9 staff (57) 6:17;7:3;8:14; 10:16;11:2;12:13; 18:17,18;21:5;30:2; 33:12;35:5;36:2; 39:15;41:9;44:18; 55:14;56:24;62:15; 64:21;66:14;72:8; 75:2;77:8;80:7,9; 81:17;86:13;89:5,6; 102:4,13;103:3; 107:7;119:21;153:15; 172:3;176:11;180:11, 13;183:1,17;186:24; 187:22;201:15,21; 203:2;208:1;219:6; 223:4;226:11;234:9, 9;241:8;242:4; 244:19;245:2 staffed (1) 38:24 staffing (2) 40:1;42:7 stage (4) 137:20;202:25,25; 203:12 staged (3) 227:16,19;231:6 stages (2) 14:6;202:24 stakeholder (4) 89:11;226:10; 239:7,13 stakeholders (11) 33:9;62:17;64:18, 21;195:9;206:25; 216:12;223:1,6; 224:11;242:5 stall (2) 22:22;167:20 stance (1) 98:7 stand (1) 142:23 standard (54) 30:5,8;34:20,21; 39:16;40:4,6;43:22; 44:7;45:18;47:10; 55:24,25;56:9;57:11; 60:6,16,18,23,25; 61:10;66:20,23;67:2, 3,7,19;68:24;70:6,6, 14;71:14,21;72:13,17, 23;74:3;75:8;79:9; 81:12;82:13;96:20; 176:14;182:14,14,16, 22,23,23;183:3,4,5; 186:22;187:1 Standards (44) stacking (1) 6:4,6;18:17;21:5; 24:10,11;32:17;36:1,</p>
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<p>13;40:13;43:14,15; 44:4;45:15,16;56:2,7; 57:15;58:25;67:18; 68:20;70:1;79:8,17; 80:9;82:9;83:2,4; 88:23;95:5;97:8; 105:18;141:25; 152:25;154:3,4; 165:3;175:17;188:3; 193:18;194:5,6; 208:16;245:14</p> <p>standing (1) 227:18</p> <p>stands (1) 20:2</p> <p>start (16) 27:25;55:22;94:17; 98:15;103:15;138:24; 142:1;153:19;161:5; 179:15,18;199:4; 201:16;206:12;207:7; 209:2</p> <p>started (5) 65:7;87:9;88:16; 162:13;201:15</p> <p>starters (1) 82:10</p> <p>starting (4) 91:3;95:4;97:1; 210:12</p> <p>Startups (1) 27:16</p> <p>start-ups (1) 197:20</p> <p>state (33) 26:10,17;27:2; 32:21;33:16;36:10; 52:22;56:14;58:8; 66:18;94:25;107:10; 111:22;115:2;145:20; 147:13;154:15; 158:17;159:9;162:14, 15;177:25;185:6; 194:24;197:7;198:1, 4;201:24;204:19; 206:2;213:11;215:13; 216:1</p> <p>stated (5) 180:20;228:1,18, 19,23</p> <p>statement (1) 120:23</p> <p>statements (1) 9:24</p> <p>States (21) 25:23;37:1;95:23; 105:3;106:25;145:17; 146:3,14,17;154:12, 16,25;174:1;184:11, 17,18;197:3;211:18, 19,23;225:20</p> <p>statewide (2) 52:9,13</p>	<p>station (1) 63:21</p> <p>statistic (1) 43:17</p> <p>Statistics (8) 95:24,24;96:3,5; 142:8,10;145:23; 184:16</p> <p>stats (1) 96:6</p> <p>stay (2) 41:17;103:23</p> <p>steal (1) 22:21</p> <p>stealing (1) 22:1</p> <p>steering (2) 193:3,4</p> <p>Steiger (5) 72:5,7;207:22,25; 225:19</p> <p>step (8) 92:9;103:24; 141:10;145:6;178:11; 191:16;227:20; 242:19</p> <p>stepped (1) 225:8</p> <p>steps (3) 31:23;64:20;100:3</p> <p>steroids (1) 164:13</p> <p>Steve (6) 7:2;11:1;18:2,18; 50:24;75:9</p> <p>steward (2) 44:6;45:3</p> <p>stewards (2) 57:17;59:7</p> <p>stewards' (1) 59:11</p> <p>stick (5) 159:19,19;162:9; 213:16,22</p> <p>sticking (1) 176:15</p> <p>sticks (1) 209:8</p> <p>still (23) 16:9;28:2;29:11; 34:16;46:18,21; 88:17;114:24;133:13; 151:8;154:1;158:4, 11;181:13;187:11; 198:2;205:7;231:9; 232:9;234:2;238:20; 239:2;243:11</p> <p>Stock (50) 6:15;10:14;77:23; 78:17,18,20;83:24; 84:4,7;86:19,22; 87:23,25;88:10; 98:21;99:24;100:6,</p>	<p>20,24;103:17;126:3; 129:9,25;130:24; 131:2,6;143:3; 149:15;152:8;155:13, 23;172:19,24;173:2; 177:3,6,9,11,15; 221:23;231:20,24; 232:3;239:4;240:14, 16,23;241:25;243:10, 12</p> <p>stolen (1) 73:23</p> <p>stone (2) 102:24,25</p> <p>stood (1) 124:9</p> <p>stop (13) 38:7;53:12;60:19; 115:21;137:12,14; 185:18,19;202:15; 205:3,20,21;231:23</p> <p>stopped (7) 84:3;114:1;115:23; 116:6;204:21;205:4,8</p> <p>stopping (1) 137:14</p> <p>stops (2) 114:3;187:4</p> <p>store (34) 21:21;22:2,12,23; 23:6,22,25;24:1,4,8; 36:15,21;37:4,12,14, 21,23;39:15,18; 40:16;41:8,11,20; 42:8;43:6,18;44:13, 15;53:9;58:3,10; 70:20,24;97:19</p> <p>stores (2) 37:2;95:9</p> <p>stories (8) 66:22;70:10,11; 73:6;89:23;90:13; 95:18;151:14</p> <p>story (3) 53:17;210:8;213:5</p> <p>straight (2) 141:9;224:22</p> <p>strain (1) 64:1</p> <p>strategic (1) 149:9</p> <p>strategies (1) 42:6</p> <p>strategy (1) 31:2</p> <p>strawberry (1) 140:2</p> <p>stream (2) 7:10;11:9</p> <p>strengths (2) 211:12,13</p> <p>strenuous (1) 125:14</p>	<p>stress (5) 57:24;174:9; 178:15;179:20;212:3</p> <p>strictly (1) 206:2</p> <p>stride (1) 172:2</p> <p>strike (1) 189:8</p> <p>strikes (1) 81:11</p> <p>stringent (1) 117:16</p> <p>stroke (2) 68:18;124:20</p> <p>strong (5) 18:4;40:5;41:17; 67:5;71:15</p> <p>stronger (4) 40:5;110:12; 120:11;142:12</p> <p>strongly (11) 17:4;40:3;45:16; 65:3;66:23;112:2; 190:4;211:24;222:3, 5;223:10</p> <p>struck (2) 189:10;213:10</p> <p>Students (1) 27:3</p> <p>studies (3) 61:4;96:9;182:3</p> <p>study (4) 60:12;61:5;96:17; 122:25</p> <p>stuff (8) 37:10;48:13; 142:14;145:22;146:8; 151:17;169:20; 187:22</p> <p>subject (4) 32:15,18;37:6; 226:8</p> <p>submit (1) 79:10</p> <p>submitted (5) 33:20;65:25; 203:13;237:4,5</p> <p>submitting (1) 75:15</p> <p>Subsection (1) 62:8</p> <p>subside (1) 118:6</p> <p>subsidiary (1) 192:23</p> <p>substance (1) 51:11</p> <p>substantial (1) 17:17</p> <p>substantive (1) 214:3</p> <p>substitute (2)</p>	<p>199:23;240:17</p> <p>succeed (1) 28:10</p> <p>successful (1) 203:16</p> <p>sudden (1) 40:22</p> <p>Suddenly (1) 17:15</p> <p>sued (1) 53:13</p> <p>suffered (1) 189:7</p> <p>suffering (1) 197:9</p> <p>sufficient (2) 84:22;227:19</p> <p>suggest (1) 154:7</p> <p>suggestion (1) 53:5</p> <p>suit (2) 191:21;192:1</p> <p>suite (1) 165:24</p> <p>suited (1) 165:24</p> <p>summer (1) 100:9</p> <p>super (1) 125:9</p> <p>superhuman (1) 171:15</p> <p>supervisor (3) 21:21;23:17;40:15</p> <p>supervisors (3) 14:9,25;15:1</p> <p>support (19) 7:5;11:4;24:10; 26:9,22;43:14;47:10; 49:1;64:15;70:4,15; 75:8;84:15;89:7; 100:13;110:19; 142:16;240:6;241:25</p> <p>Supporting (3) 7:1;10:25;86:9</p> <p>supports (1) 214:22</p> <p>Suppose (1) 117:19</p> <p>supposed (6) 19:25;85:4;167:16, 22;168:5;210:14</p> <p>sure (56) 14:1;27:10;45:12; 49:11,22;50:21; 51:11;61:19;65:11; 72:25;74:8;86:6,22; 87:24;97:8;98:17; 101:11;109:10,12; 112:14;113:7,8,9; 115:9;125:24;127:3, 20;133:9;136:9;</p>
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137:6;143:22;148:10; 21;152:12;154:21; 156:24;158:23;163:1; 165:4;174:13;175:21; 178:15;179:10; 185:21;195:11,25; 209:12;212:7;226:17; 227:21;230:9,12,25; 233:3;235:6;236:24	168:8;185:16,19; 190:3;200:8	19:5;31:10;32:4,17; 194:16	12:2,16,20,23;245:16	118:24,25,25;120:22; 123:25;156:19; 201:10;215:1
surfaces (2) 102:15;221:7	T	tax (1) 20:4	telling (1) 152:10	that- (1) 151:13
surprise (1) 34:18	tab (1) 172:8	taxing (1) 158:13	temperatures (1) 55:24	theft (3) 38:7;44:12;52:20
surprised (2) 95:13;181:25	table (11) 7:7;11:6;98:9; 125:2;170:8;216:22; 238:21;239:3;240:7; 242:4,13	taxpayer (1) 189:18	Temporary (9) 107:19;137:21; 201:14,17;202:24; 213:6;225:9;226:3; 234:6	thefts (2) 52:13,21
surprising (1) 165:8	tackle (4) 24:5;35:21;53:7; 137:10	teaching (1) 107:11	ten (5) 50:21;171:9;172:4; 190:6;220:12	theme (1) 84:24
surveillance (2) 19:9;31:17	tackling (1) 53:6	team (5) 103:10;162:16,24; 164:18;203:22	tend (1) 160:1	Therefore (7) 9:20;67:1;89:1; 167:21;208:16;217:3, 13
survey (2) 59:7;130:18	tackled (1) 67:8	teams (1) 164:16	term (1) 159:21	there'll (2) 199:15,18
surveys (4) 129:20;138:2; 155:10;217:17	takeoff (2) 210:15,24	tear (1) 203:11	terms (10) 85:17;98:8;131:10; 148:1;150:4;166:5; 206:10;225:11; 226:22,24	thermal-image (1) 164:4
survive (1) 185:10	talk (27) 16:1;18:2;21:1,9; 51:20;94:5;110:15; 119:21;124:24; 125:15;136:12;141:8; 143:13;144:22; 149:21;152:15; 158:14;163:4;172:16; 191:2;192:8;196:23; 215:16;217:7;221:10; 231:9;235:20	tech (8) 26:25;27:17;48:14; 68:14;181:6;196:14; 198:1;216:6	terrific (4) 52:14;53:17;70:11; 175:25	thermal-images (1) 171:2
susceptible (2) 46:21;197:19	talked (18) 15:20;16:13; 101:23;120:6;129:11; 140:8;142:15;149:2, 3;155:25;157:25; 167:12;168:1;185:14; 191:18;197:15;207:8; 222:22	technician (1) 44:5	terrifying (1) 209:3	thermostat (1) 121:2
suspect (1) 191:13	talking (32) 18:22;50:24,25; 61:7;65:7;80:17; 94:15;105:22;122:5; 124:25;125:5;132:12, 21;137:1;139:11,15, 16;148:1;156:21; 160:24;161:20; 181:10,12;188:14; 189:25;192:21; 204:14;212:14;217:8; 222:10;224:2;233:20	Technological (3) 46:23;105:10,15	terrible (4) 52:14;53:17;70:11; 175:25	thieves (4) 24:5;53:6,7,10
sustainable (1) 63:25	talked (18) 15:20;16:13; 101:23;120:6;129:11; 140:8;142:15;149:2, 3;155:25;157:25; 167:12;168:1;185:14; 191:18;197:15;207:8; 222:22	technologies (13) 25:17;27:25;28:7; 62:10;105:16;184:25; 185:4;190:24;192:23; 193:2;203:21;206:19; 207:17	terrorism (1) 116:25;117:4,10	thing's (1) 120:18
sustainablely (1) 105:11	talked (18) 15:20;16:13; 101:23;120:6;129:11; 140:8;142:15;149:2, 3;155:25;157:25; 167:12;168:1;185:14; 191:18;197:15;207:8; 222:22	technology (78) 26:4,6,13,18;27:5,7, 13,20;28:2,13;46:18, 20;48:13,19,23;49:8; 52:4,4;68:14;106:21; 111:4;114:25;117:14; 118:2;124:14;132:12; 134:19;135:2;137:3, 5,5;138:23;142:17; 144:12;149:24; 154:13,25;158:18,22; 159:10,11;160:5; 161:1,10,22;167:4; 170:19;183:7;186:7; 192:9,15;193:11,20; 194:3;197:2,5,6,20; 204:19;205:13;206:2; 209:1,13,19;210:5; 211:11,13,15;214:21; 215:20;216:1,6,20; 217:16;218:13;219:9; 220:10;226:4	test (7) 131:10,19;137:2; 150:18,18,18;203:24	third (4) 102:14,17;105:2; 221:6
sustained (1) 16:13	talked (18) 15:20;16:13; 101:23;120:6;129:11; 140:8;142:15;149:2, 3;155:25;157:25; 167:12;168:1;185:14; 191:18;197:15;207:8; 222:22	technologist (2) 163:4,16	testify (4) 30:14;36:17;44:6; 89:20	THOMAS (226) 6:3,8;10:7;13:12; 14:3;18:13;21:13; 24:15,22,25;25:3,5,9; 27:8,11;29:1,5,15,19, 22;30:1;34:5,9,11; 36:8;40:9;44:1,45;23; 46:3,6,8;47:21,25; 48:6;49:5,10,22;50:1, 2,4;55:4,8,11;57:3; 59:16,23,25;61:13,16; 65:10,16,21,23;66:2, 5,9,11;67:24;68:3; 69:8,12,15;72:2,6,7; 74:14,20,23,25;75:1, 19,23;76:3,8,10,14, 18;77:15,19,22,24; 78:6,21,22;80:25; 83:21;84:3,5;86:18, 20,23;87:8,24;88:6; 90:17,20;91:23;92:8, 25;94:2,4,7,9,12; 98:20;101:1,6,8,20, 22;103:12,21;104:4,9, 13,22;108:11;114:8, 11;119:24;122:8; 123:22;126:8;132:8; 135:6;141:2;143:2; 145:8,15;146:12; 150:12;155:24; 160:10;162:11; 172:20,23,25;174:15, 17,20,24;175:2;176:5,
sweeps (1) 100:8	talked (18) 15:20;16:13; 101:23;120:6;129:11; 140:8;142:15;149:2, 3;155:25;157:25; 167:12;168:1;185:14; 191:18;197:15;207:8; 222:22	technology (78) 26:4,6,13,18;27:5,7, 13,20;28:2,13;46:18, 20;48:13,19,23;49:8; 52:4,4;68:14;106:21; 111:4;114:25;117:14; 118:2;124:14;132:12; 134:19;135:2;137:3, 5,5;138:23;142:17; 144:12;149:24; 154:13,25;158:18,22; 159:10,11;160:5; 161:1,10,22;167:4; 170:19;183:7;186:7; 192:9,15;193:11,20; 194:3;197:2,5,6,20; 204:19;205:13;206:2; 209:1,13,19;210:5; 211:11,13,15;214:21; 215:20;216:1,6,20; 217:16;218:13;219:9; 220:10;226:4	testimony (1) 126:10	testing (7) 31:17;47:14,16; 51:16,18;174:13; 229:4
swiftly (2) 45:17;70:5	talking (32) 18:22;50:24,25; 61:7;65:7;80:17; 94:15;105:22;122:5; 124:25;125:5;132:12, 21;137:1;139:11,15, 16;148:1;156:21; 160:24;161:20; 181:10,12;188:14; 189:25;192:21; 204:14;212:14;217:8; 222:10;224:2;233:20	techs (2) 47:4;181:11	tests (1) 137:22	TEV (1) 128:16
switch (2) 104:4;141:5	talking (32) 18:22;50:24,25; 61:7;65:7;80:17; 94:15;105:22;122:5; 124:25;125:5;132:12, 21;137:1;139:11,15, 16;148:1;156:21; 160:24;161:20; 181:10,12;188:14; 189:25;192:21; 204:14;212:14;217:8; 222:10;224:2;233:20	teleconference (13) 6:13;7:15;8:3,17, 21,24;10:12;11:14;	testifying (1) 126:10	Texas (3) 184:11;225:20,20
sympathize (1) 80:17	talking (32) 18:22;50:24,25; 61:7;65:7;80:17; 94:15;105:22;122:5; 124:25;125:5;132:12, 21;137:1;139:11,15, 16;148:1;156:21; 160:24;161:20; 181:10,12;188:14; 189:25;192:21; 204:14;212:14;217:8; 222:10;224:2;233:20		testimony (9) 8:12;12:11;107:24; 141:16;213:4;223:6; 224:12;225:10; 239:10	TFE (3) 55:7;65:15;76:13
system (28) 38:22;83:13;96:23; 97:7;109:21;115:25; 118:10,13,15;120:10, 11,25;121:8,9; 152:19;161:5;164:20, 22;166:6,11,12; 189:1;190:5,12,14; 211:2;217:1;239:12	talking (32) 18:22;50:24,25; 61:7;65:7;80:17; 94:15;105:22;122:5; 124:25;125:5;132:12, 21;137:1;139:11,15, 16;148:1;156:21; 160:24;161:20; 181:10,12;188:14; 189:25;192:21; 204:14;212:14;217:8; 222:10;224:2;233:20		testing (7) 31:17;47:14,16; 51:16,18;174:13; 229:4	thanks (14) 66:13;80:25;88:12; 108:12;117:24,24;
systematic (1) 183:4	talking (32) 18:22;50:24,25; 61:7;65:7;80:17; 94:15;105:22;122:5; 124:25;125:5;132:12, 21;137:1;139:11,15, 16;148:1;156:21; 160:24;161:20; 181:10,12;188:14; 189:25;192:21; 204:14;212:14;217:8; 222:10;224:2;233:20		tests (1) 137:22	
systems (17) 107:12;110:12; 111:15,20;118:22; 120:13;121:21; 142:12;144:17; 147:19;161:3;163:17;	talking (32) 18:22;50:24,25; 61:7;65:7;80:17; 94:15;105:22;122:5; 124:25;125:5;132:12, 21;137:1;139:11,15, 16;148:1;156:21; 160:24;161:20; 181:10,12;188:14; 189:25;192:21; 204:14;212:14;217:8; 222:10;224:2;233:20		TEV (1) 128:16	
	talking (32) 18:22;50:24,25; 61:7;65:7;80:17; 94:15;105:22;122:5; 124:25;125:5;132:12, 21;137:1;139:11,15, 16;148:1;156:21; 160:24;161:20; 181:10,12;188:14; 189:25;192:21; 204:14;212:14;217:8; 222:10;224:2;233:20		tests (1) 137:22	
	talking (32) 18:22;50:24,25; 61:7;65:7;80:17; 94:15;105:22;122:5; 124:25;125:5;132:12, 21;137:1;139:11,15, 16;148:1;156:21; 160:24;161:20; 181:10,12;188:14; 189:25;192:21; 204:14;212:14;217:8; 222:10;224:2;233:20		tests (1) 137:22	
	talking (32) 18:22;50:24,25; 61:7;65:7;80:17; 94:15;105:22;122:5; 124:25;125:5;132:12, 21;137:1;139:11,15, 16;148:1;156:21; 160:24;161:20; 181:10,12;188:14; 189:25;192:21; 204:14;212:14;217:8; 222:10;224:2;233:20		tests (1) 137:22	
	talking (32) 18:22;50:24,25; 61:7;65:7;80:17; 94:15;105:22;122:5; 124:25;125:5;132:12, 21;137:1;139:11,15, 16;148:1;156:21; 160:24;161:20; 181:10,12;188:14; 189:25;192:21; 204:14;212:14;217:8; 222:10;224:2;233:20		tests (1) 137:22	
	talking (32) 18:22;50:24,25; 61:7;65:7;80:17; 94:15;105:22;122:5; 124:25;125:5;132:12, 21;137:1;139:11,15, 16;148:1;156:21; 160:24;161:20; 181:10,12;188:14; 189:25;192:21; 204:14;212:14;217:8; 222:10;224:2;233:20		tests (1) 137:22	
	talking (32) 18:22;50:24,25; 61:7;65:7;80:17; 94:15;105:22;122:5; 124:25;125:5;132:12, 21;137:1;139:11,15, 16;148:1;156:21; 160:24;161:20; 181:10,12;188:14; 189:25;192:21; 204:14;212:14;217:8; 222:10;224:2;233:20		tests (1) 137:22	
	talking (32) 18:22;50:24,25; 61:7;65:7;80:17; 94:15;105:22;122:5; 124:25;125:5;132:12, 21;137:1;139:11,15, 16;148:1;156:21; 160:24;161:20; 181:10,12;188:14; 189:25;192:21; 204:14;212:14;217:8; 222:10;224:2;233:20		tests (1) 137:22	
	talking (32) 18:22;50:24,25; 61:7;65:7;80:17; 94:15;105:22;122:5; 124:25;125:5;132:12, 21;137:1;139:11,15, 16;148:1;156:21; 160:24;161:20; 181:10,12;188:14; 189:25;192:21; 204:14;212:14;217:8; 222:10;224:2;233:20		tests (1) 137:22	
	talking (32) 18:22;50:24,25; 61:7;65:7;80:17; 94:15;105:22;122:5; 124:25;125:5;132:12, 21;137:1;139:11,15, 16;148:1;156:21; 160:24;161:20; 181:10,12;188:14; 189:25;192:21; 204:14;212:14;217:8; 222:10;224:2;233:20		tests (1) 137:22	
	talking (32) 18:22;50:24,25; 61:7;65:7;80:17; 94:15;105:22;122:5; 124:25;125:5;132:12, 21;137:1;139:11,15, 16;148:1;156:21; 160:24;161:20; 181:10,12;188:14; 189:25;192:21; 204:14;212:14;217:8; 222:10;224:2;233:20		tests (1) 137:22	
	talking (32) 18:22;50:24,25; 61:7;65:7;80:17; 94:15;105:22;122:5; 124:25;125:5;132:12, 21;137:1;139:11,15, 16;148:1;156:21; 160:24;161:20; 181:10,12;188:14; 189:25;192:21; 204:14;212:14;217:8; 222:10;224:2;233:20		tests (1) 137:22	
	talking (32) 18:22;50:24,25; 61:7;65:7;80:17; 94:15;105:22;122:5; 124:25;125:5;132:12, 21;137:1;139:11,15, 16;148:1;156:21; 160:24;161:20; 181:10,12;188:14; 189:25;192:21; 204:14;212:14;217:8; 222:10;224:2;233:20		tests (1) 137:22	
	talking (32) 18:22;50:24,25; 61:7;65:7;80:17; 94:15;105:22;122:5; 124:25;125:5;132:12, 21;137:1;139:11,15, 16;148:1;156:21; 160:24;161:20; 181:10,12;188:14; 189:25;192:21; 204:14;212:14;217:8; 222:10;224:2;233:20		tests (1) 137:22	
	talking (32) 18:22;50:24,25; 61:7;65:7;80:17; 94:15;105:22;122:5; 124:25;125:5;132:12, 21;137:1;139:11,15, 16;148:1;156:21; 160:24;161:20; 181:10,12;188:14; 189:25;192:21; 204:14;212:14;217:8; 222:10;224:2;233:20		tests (1) 137:22	
	talking (32) 18:22;50:24,25; 61:7;65:7;80:17; 94:15;105:22;122:5; 124:25;125:5;132:12, 21;137:1;139:11,15, 16;148:1;156:21; 160:24;161:20; 181:10,12;188:14; 189:25;192:21; 204:14;212:14;217:8; 222:10;224:2;233:20		tests (1) 137:22	
	talking (32) 18:22;50:24,25; 61:7;65:7;80:17; 94:15;105:22;122:5; 124:25;125:5;132:12, 21;137:1;139:11,15, 16;148:1;156:21; 160:24;161:20; 181:10,12;188:14; 189:25;192:21; 204:14;212:14;217:8; 222:10;224:2;233:20		tests (1) 137:22	
	talking (32) 18:22;50:24,25; 61:7;65:7;80:17; 94:15;105:22;122:5; 124:25;125:5;132:12, 21;137:1;139:11,15, 16;148:1;156:21; 160:24;161:20; 181:10,12;188:14; 189:25;192:21; 204:14;212:14;217:8; 222:10;224:2;233:20		tests (1) 137:22	
	talking (32) 18:22;50:24,25; 61:7;65:7;80:17; 94:15;105:22;122:5; 124:25;125:5;132:12, 21;137:1;139:11,15, 16;148:1;156:21; 160:24;161:20; 181:10,12;188:14; 189:25;192:21; 204:14;212:14;217:8; 222:10;224:2;233:20		tests (1) 137:22	

<p>17,19,22;177:5,7,10, 18,21;180:11;183:24; 186:11;187:16; 192:12,16,18,19; 195:17,21;196:2,4; 198:16,20,23,25; 200:25;201:5,8; 207:6,20,24,25;214:7, 11,14,25;215:6,9; 217:20,22;218:1,2; 219:15,20;224:15,19, 24;226:14,17;228:8, 10;229:6,12,19; 230:9;231:4,22; 232:1,24;233:3,9,13, 18;234:12;235:4,17, 25;236:2,24;237:11, 13;241:5,10,22; 242:12,15,20,22,25; 243:13,14;244:17; 245:8,13</p> <p>thorough (1) 72:24</p> <p>thoroughly (1) 225:1</p> <p>though (7) 41:16;45:8;54:10, 20;102:9;169:7; 218:20</p> <p>thought (10) 23:8;41:14;62:2; 65:24;147:24;173:17; 210:18;233:7;236:19; 237:21</p> <p>thoughtful (1) 121:19</p> <p>thoughts (2) 172:22;196:8</p> <p>thousands (4) 72:21;86:8;95:19; 107:2</p> <p>threat (2) 42:2;44:13</p> <p>threatened (2) 44:18;70:12</p> <p>threats (2) 16:22;142:13</p> <p>three (24) 8:11,11;12:10,10; 14:5;15:12;17:18; 20:4;23:7;27:5;41:21; 52:17;59:22;92:3; 93:13;163:17,18; 201:2,23;202:9,17,24; 204:5;212:13</p> <p>three-year (2) 64:13;182:3</p> <p>threshold (1) 32:3</p> <p>thresholds (1) 50:13</p> <p>throughout (6) 33:8;174:13;187:7;</p>	<p>208:8;215:13;216:1</p> <p>throw (2) 37:10;116:20</p> <p>thrown (1) 37:11</p> <p>tied (1) 243:15</p> <p>til (6) 49:20;66:1;131:7; 230:4,6;233:20</p> <p>till (1) 124:18</p> <p>timeframe (1) 63:2</p> <p>timers (1) 111:17</p> <p>times (19) 21:25;22:2;67:8; 71:11,25;92:1,4; 149:2;155:8;164:14; 174:10;184:10;190:6; 200:14;201:18; 204:11;212:12,12; 216:16</p> <p>tiny (1) 238:8</p> <p>tired (1) 171:13</p> <p>Title (11) 49:1;63:1;68:7,19; 80:6;186:8;196:25; 198:14;204:10; 214:21;242:7</p> <p>today (60) 21:18;25:8,15; 28:24;34:3;40:16; 43:3;55:15,22;56:5, 22;57:22;61:17,19; 63:17;72:9;73:7; 77:17;80:13,18; 105:14,22;106:14; 112:18,19;124:17; 134:20;142:5;147:1; 180:21;182:18;185:5, 8,15;187:6,24;192:7, 20;195:15;196:7,17, 21;197:12;199:3; 200:16,23;204:7,17; 206:10;208:3,8; 214:19;217:4;218:4, 14;219:9;221:4; 225:11;231:6;245:19</p> <p>today's (13) 6:17;7:7,14,21;9:2; 10:3,16;11:6,13,20; 13:1;33:20;36:18</p> <p>together (30) 28:12,21,22;48:7; 64:19;96:24;105:20; 110:17;118:18;129:4; 133:24;136:17; 138:21;149:4;152:15; 153:5;178:10;182:24;</p>	<p>183:17;193:22;194:1; 195:11;206:25; 218:21;219:12; 220:14;221:10;223:1; 236:20;237:22</p> <p>toil (1) 124:20</p> <p>told (10) 14:17;38:23;45:7; 58:3;59:6;137:25; 162:8;172:14;210:10, 23</p> <p>tolerance (1) 16:22</p> <p>toll (2) 37:19;136:6</p> <p>tomorrow (1) 43:11</p> <p>ton (1) 168:22</p> <p>tongue (1) 124:9</p> <p>tons (1) 209:20</p> <p>took (3) 16:1;23:11;71:2</p> <p>tool (1) 179:21</p> <p>toolbox (1) 179:22</p> <p>tools (4) 47:1;180:7,9;194:8</p> <p>top (6) 62:12;101:25; 133:2,3,24;185:22</p> <p>topic (3) 69:4;204:8;214:23</p> <p>topics (3) 194:2;208:9,11</p> <p>total (6) 9:6;13:5;135:2; 203:6,7;204:18</p> <p>totally (2) 174:12;204:21</p> <p>touch (7) 50:7;51:24;52:7,11; 53:10;54:24;137:15</p> <p>touched (2) 141:8;156:12</p> <p>tough (1) 95:9</p> <p>tour (1) 182:13</p> <p>tout (1) 108:5</p> <p>tow (1) 130:19</p> <p>toward (1) 156:2</p> <p>towards (5) 22:15;63:24;108:3; 221:14;232:6</p> <p>toxicology (1)</p>	<p>61:3</p> <p>track (3) 56:15;68:23;168:11</p> <p>tracking (6) 58:4,13;95:14,17, 20;97:24</p> <p>tractor (96) 25:7,21,22;26:10; 62:12;68:12;114:21; 115:25;116:2,4,6,7, 12,21;122:5;124:17; 128:20;129:2,19,23; 130:7,23;131:16,18, 24;132:20;133:5,6,8, 10,12,14,15,20,21; 134:1;135:21,23,23, 24,25;136:2,21; 137:15;139:14,15,17; 144:19;159:17; 160:16,17,21,23; 161:24;163:11; 165:13,15;167:3,9; 168:5,6,7,20;169:11; 170:3;173:19,22,22; 181:3;184:20;185:3, 19,20,23;191:1,2,12, 13,15,19,19,20,22; 199:11;200:13;201:4, 12;202:3,6,13,14; 203:9;204:1;206:21; 228:13;234:24</p> <p>tractors (62) 51:24;56:13;62:11; 74:11;106:12,21; 110:8;114:17;115:11, 21,23;116:14;117:6; 121:6;125:11;127:17; 130:11,12,15,16,19; 131:11;136:4;137:10; 138:3;140:9;167:1, 15,15;168:2;173:25, 25;174:6,6;184:4; 185:16,21;191:3,6,10, 11;199:5;200:19,20, 201:23;202:1,9,19; 208:2,10;214:20; 220:4;227:6,11,12; 228:16;234:21; 235:13,14,19,23,23</p> <p>tractor's (5) 115:24;116:23,24; 117:2;191:22</p> <p>Trades (1) 75:3</p> <p>tradition (1) 48:16</p> <p>traditional (6) 32:2;62:11;130:11, 19;159:18;170:21</p> <p>tragic (2) 39:7;54:9</p> <p>trailer (3) 15:24;130:19,22</p>	<p>trailers (3) 15:22;200:18,21</p> <p>train (2) 21:2;159:12</p> <p>trained (4) 23:15;24:4;42:5; 158:24</p> <p>training (30) 20:8;23:17,17,19; 26:23;27:4;32:23; 33:1;39:20,24;58:4, 19,23;69:21;70:7,25; 71:3,7,15,17;72:17; 80:16;84:18;90:9; 97:16,21;158:19; 159:8,14;163:7</p> <p>trainings (2) 71:16,22</p> <p>trains (1) 121:3</p> <p>transferable (2) 28:14;158:25</p> <p>transform (1) 198:2</p> <p>transients (1) 44:12</p> <p>transition (1) 203:1</p> <p>translate (2) 164:2;231:1</p> <p>translation (3) 6:20;9:24;10:19</p> <p>transparency (2) 117:17;237:8</p> <p>transparent (1) 119:6</p> <p>transpires (1) 221:17</p> <p>traumatic (2) 42:17;80:15</p> <p>traumatized (1) 37:13</p> <p>travel (1) 26:2</p> <p>traveled (3) 203:6,15;222:19</p> <p>Travis (4) 66:7,9,11,15</p> <p>treat (1) 56:7</p> <p>treated (1) 45:21</p> <p>tree (4) 113:17;124:6,11; 150:17</p> <p>trees (1) 210:16</p> <p>tremendous (2) 171:14,22</p> <p>tremendously (1) 150:5</p> <p>trend-setter (1) 48:18</p>
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<p>Trent (5) 49:8;192:15,16,22; 225:14</p> <p>Trevino (4) 48:3,5,7,10</p> <p>triage (2) 35:9;205:19</p> <p>triaging (1) 35:18</p> <p>trichloroethylene (1) 80:5</p> <p>tried (1) 22:15</p> <p>tries (1) 20:7</p> <p>trigger (1) 19:5</p> <p>triggered (1) 204:25</p> <p>triggers (1) 30:22</p> <p>trigger-task (1) 19:6</p> <p>TRINIDAD (2) 36:12,14</p> <p>trouble (4) 156:3;170:17; 172:9;182:9</p> <p>trouble-shoot (1) 167:17</p> <p>troubling (1) 53:14</p> <p>true (5) 120:15;201:24; 204:24;210:5;220:23</p> <p>truly (5) 54:25;136:10; 170:13;171:16; 216:11</p> <p>trust (2) 123:9;212:22</p> <p>truth (4) 94:17;95:13;97:2; 220:11</p> <p>truthful (1) 116:15</p> <p>try (8) 13:13;52:15;88:18; 116:6;151:20;155:19; 207:12;232:20</p> <p>trying (22) 13:14;16:18;20:12; 33:7;50:21;52:1,16; 53:1;62:14;86:14; 124:16,18;126:15; 137:10;162:4;165:19; 207:15;210:25; 222:25;229:4;236:13; 245:5</p> <p>Tulare (1) 113:25</p> <p>turn (3) 8:18;12:17;224:22</p>	<p>turned (2) 23:1;210:20</p> <p>TV (2) 121:14,15</p> <p>twice (1) 75:24</p> <p>two (49) 7:22;9:2,4;11:21; 13:1,3;19:14;22:6; 23:25;31:22;32:25; 36:23;41:11,12; 42:13;59:20,22;60:1; 61:10;62:6;72:4; 93:12;102:4,5,6; 108:18;114:13; 128:19;138:21;139:8, 9;162:13;163:2,21; 165:22;204:9;205:2; 218:23,24;225:23; 229:21;235:11,12,15, 20;236:3;238:18,18; 245:3</p> <p>two-microgram (1) 32:3</p> <p>type (5) 122:16;131:12,19; 165:25;234:20</p> <p>types (5) 23:16;42:6;170:20; 174:14;205:16</p> <p>typical (2) 44:12;191:19</p> <p>typically (4) 32:16;64:12;232:6; 234:21</p> <p>Tyvek (2) 191:21;192:1</p> <p>Tyvx (1) 236:8</p>	<p>under (14) 15:4;16:13;17:16; 41:17;80:4;89:6; 92:21;99:11,16; 154:16;201:23;203:5; 204:4;234:21</p> <p>underestimated (1) 27:16</p> <p>underline (2) 173:4,13</p> <p>under-reported (1) 150:5</p> <p>underscored (1) 170:16</p> <p>understaffed (1) 23:24</p> <p>understandable (6) 51:1;81:14,18,25; 82:3;83:14</p> <p>understandably (1) 119:2</p> <p>understood (2) 30:21;152:19</p> <p>undocumented (1) 136:23</p> <p>unfilled (1) 26:12</p> <p>unfortunate (2) 70:12;140:24</p> <p>Unfortunately (5) 23:15;37:9;44:19; 108:25;109:5</p> <p>UNIDENTIFIED (11) 104:1;106:4; 112:23;129:24; 140:11,14,22;178:4; 219:19;227:1;228:9</p> <p>unintelligible (27) 26:15;32:2;49:9; 50:10;52:15;76:9; 78:18;94:3;112:23, 25;114:10;135:9; 140:15;169:17;177:4, 9;178:4;192:25; 214:24;215:10; 219:19;220:21; 226:16;227:1;228:9; 234:18;241:18</p> <p>union (9) 18:20;20:21,22,23, 23;37:22;53:3;75:6; 166:21</p> <p>unions (3) 173:9;206:16;219:5</p> <p>unique (2) 27:21;37:9</p> <p>uniquely (1) 197:24</p> <p>United (10) 25:23;37:1;57:5; 69:17;74:22;75:2; 95:23;104:24;105:3; 184:18</p>	<p>Univac (1) 63:3</p> <p>universities (1) 193:20</p> <p>University (2) 107:10;193:25</p> <p>university's (1) 160:9</p> <p>unknown (1) 204:21</p> <p>unless (7) 16:24;77:11; 131:25;143:10; 150:22;206:13; 221:21</p> <p>unmanned (1) 159:22</p> <p>unmute (6) 7:18;8:19,20;11:17; 12:18,19</p> <p>unnecessarily (1) 32:14</p> <p>unnecessary (2) 26:7;31:24</p> <p>unpack (2) 20:13;21:1</p> <p>unprecedented (1) 198:1</p> <p>unpredictable (1) 42:4</p> <p>unregulated (1) 56:13</p> <p>unsafe (3) 37:21;91:12;118:15</p> <p>unstacking (1) 15:22</p> <p>unsure (1) 205:7</p> <p>unthinkable (1) 124:21</p> <p>unusual (1) 232:18</p> <p>unventilated (1) 15:24</p> <p>up (110) 9:4;13:3,22;15:19; 18:14;20:21;24:19; 26:14;29:3,13,17; 34:7;37:19,20;39:1,5; 41:8;45:25;46:1; 47:23;48:3;49:8,24; 51:12;55:7;62:2; 64:17;65:15,19;66:7; 68:1;69:10;71:3; 74:18,21;76:23;78:2; 80:12;82:20;83:6,17; 86:24;87:4;88:12; 98:23;100:16,16; 105:19;106:5;112:6; 115:17;119:12;124:2; 125:6;126:7;127:8, 22;139:8,10;142:1,9, 19,23;143:25;144:2;</p>	<p>147:4,8;149:23; 151:12;154:19; 160:12;166:12; 168:21;172:5;173:18; 176:23;177:25; 178:12,18,23;179:2; 182:18;189:11,15,16; 192:14;195:19,25; 198:18;201:18; 202:20;204:17; 206:13;207:21,22; 210:15;212:21;213:6; 214:9;216:22;225:11; 230:15;232:13,18; 233:19;237:8,16; 238:16,25;239:22</p> <p>update (12) 49:1;68:7;72:14,17, 23;78:24;80:6,10,24; 128:6;195:5;214:20</p> <p>updated (4) 31:25;56:2;80:22; 94:16</p> <p>updates (3) 19:12;108:7;245:18</p> <p>updating (1) 68:24</p> <p>upgrades (1) 83:2</p> <p>uphold (1) 45:15</p> <p>upholding (1) 68:19</p> <p>upon (4) 59:6;115:12,16; 136:18</p> <p>upscale (2) 198:5;209:7</p> <p>upscaling (2) 147:13;216:4</p> <p>upward (1) 160:8</p> <p>upwards (1) 147:16</p> <p>urban (1) 114:25</p> <p>urge (14) 24:9;40:3;45:16; 56:7;58:24;72:13; 73:4;112:2;195:1; 213:16;214:4;222:5; 223:10;224:7</p> <p>urgency (2) 36:18;100:22</p> <p>urgent (10) 44:6;89:12;90:1,2, 10;186:22;222:8,15; 223:12;240:2</p> <p>urging (1) 71:13</p> <p>USB (1) 121:14</p> <p>USCW (1)</p>
	<p>U</p>			
	<p>ubiquitous (1) 60:11</p> <p>UC (2) 27:2;158:17</p> <p>UFCW (11) 47:8;66:19;69:11, 19;106:24,25;114:12; 135:18;186:13,18; 187:15</p> <p>ultimate (1) 37:24</p> <p>ultimately (3) 19:25;20:14;28:1</p> <p>unavailable (1) 156:9</p> <p>unavoidable (2) 46:23;167:7</p> <p>unaware (1) 33:10</p> <p>unclear (1) 62:8</p>			

<p>36:14 USDA (1) 107:15 use (37) 15:8;28:2;49:2; 56:13;61:4;64:12,15; 67:19;68:21,22; 109:10,11,14;110:11; 126:10;132:15,18; 134:6,20;154:24; 159:13,21;164:16,16, 19;165:3;190:5; 191:5,5,15;199:5; 200:11;214:21; 222:13;223:13; 234:24;235:19 used (32) 13:13;18:14;33:19; 70:16;80:14;115:21; 122:17;127:17; 128:20;130:7,13,14, 23;132:25;134:15; 136:5;140:20;141:19; 142:7;151:16;156:21; 163:6;164:14;185:8; 190:13,13,15;199:14; 207:10;228:1;235:13, 15 useful (2) 119:13;232:23 user (1) 109:12 users (2) 119:7;163:7 uses (3) 190:23,23;193:17 using (19) 8:19,21;12:18,20; 91:5;112:22;113:6; 120:6;125:3;130:10, 18;134:12;157:5; 168:20;182:6;185:4; 197:15;227:9;234:20 USS (1) 189:6 usual (1) 187:21 usually (6) 9:8;13:7;76:21; 86:23;175:2;176:23 utilities (2) 30:6;33:15</p>	<p>valid (3) 30:11;33:23;34:1 Valley (7) 26:19;48:15,22; 69:6;125:12;196:12; 199:17 valuable (1) 152:13 value (2) 137:6;139:7 variance (68) 9:18,18,21;107:20; 127:7,10,11,13,14,16, 25;128:25;129:1,6, 19;130:22;136:7; 137:21,24;143:8; 144:25;148:10,18; 155:16;187:10; 201:14,17,22,24; 202:8,12,24;203:6,13; 204:2,4,7,9,11;213:2, 7,8,13,18,21;223:18; 225:10;226:3,22,24; 227:4,14,25;228:7,12; 229:3,13,15,18; 231:15;233:10;234:6, 21,24;237:3,20; 238:3;239:18 variances (5) 64:13;77:13;226:9, 12;237:9 variant (2) 143:10;224:9 varied (1) 126:18 varieties (1) 111:6 variety (4) 112:4;156:20; 206:17,18 various (4) 14:6;117:15; 190:25;240:2 vary (2) 38:16;121:7 vastly (1) 174:4 vegetables (1) 105:3 vehicle (10) 131:15;140:25; 168:23;205:1,3,8,8; 229:8;236:4,7 vehicles (19) 56:19;65:25; 105:24;117:5,11; 140:1;145:11;148:7; 152:3;166:20;197:17; 199:25;202:9;203:7; 204:5;205:19,20,21, 22 vehicle's (1) 117:3</p>	<p>venture (3) 144:7;197:21; 209:19 venue (2) 218:20;220:22 verbal (2) 37:6;57:19 verbally (2) 22:1;228:20 verifiable (2) 194:13;225:15 verify (1) 117:18 versus (1) 148:5 via (18) 6:12;7:9,12,14;8:3, 16,24;10:11;11:8,11, 13;12:2,15,23;216:2, 5,6;245:15 vibrations (1) 146:25 vicinity (1) 202:10 victims (1) 36:24 video (14) 7:10;8:4,17,24; 11:9;12:3,16,23; 140:18,23;155:4; 159:20;160:1;245:16 videoconference (2) 7:15;11:14 view (3) 148:1;205:5;215:20 viewed (1) 63:5 Vincent (1) 44:4 vines (2) 113:16;200:2 vineyard (8) 113:13;156:22; 157:5,8,12,16;159:3; 169:21 Vino (2) 29:4;75:22 Vinson (1) 189:6 violating (1) 226:23 violation (1) 229:2 violations (1) 200:13 violence (71) 16:19;21:19,24; 23:16;24:13;36:19, 21,24,25;37:3,17; 39:12,16,21;40:1,4, 18;43:21;44:7;45:12, 18,19,20;54:13;56:6, 7,10;57:13,18;58:14,</p>	<p>17,18;66:20;67:2,5,7, 14,18,21;70:5;72:11; 73:6;80:10,15;81:8, 22;82:20,24,24;86:3; 89:13;90:24;95:7,25; 96:8,17,19;97:18; 98:3,5;99:4,15,20; 100:4,12,19,20; 186:22;187:1;222:23; 240:5 virtually (2) 137:9;190:3 visibility (1) 168:16 visible (2) 23:20;95:21 vision (1) 193:4 visit (2) 128:11;245:16 visual (1) 139:10 vital (1) 93:2 voice (6) 15:8;18:4;27:9; 30:15;84:19;173:14 voicemail (2) 8:9;12:8 voices (3) 90:15;232:21;239:9 Von's (1) 37:4 vote (11) 36:5;77:7;85:25; 93:21;222:3,5;224:8; 238:21;239:5;240:9; 241:18 votes (1) 243:16 voting (1) 240:8 vulnerability (2) 121:1,20 vulnerable (6) 105:13;121:10,11, 17;122:20;136:23</p>	<p>44:8;89:13;160:21; 204:15;238:8 waits (1) 205:5 walked (2) 22:15,25 walking (3) 102:15;130:15; 221:7 wall (2) 60:22;75:2 Walter (1) 107:9 wants (1) 221:21 warehouse (1) 15:14 warranted (1) 222:14 Washington (1) 132:16 watch (1) 121:14 watchdog (1) 111:16 watching (3) 116:4;166:25; 167:14 water (3) 105:10;107:16; 159:13 way (51) 15:19;17:22;20:19, 25;31:6;35:19;38:9; 48:19;54:2;61:23; 67:6;81:24;89:16; 122:14;132:3;138:22; 146:4,6;148:8,11; 149:13,23;150:2; 152:5;155:17;156:23; 160:16;167:1;171:1; 172:12;183:15;186:6; 188:2;190:14;191:8; 202:16;213:9,23; 215:18,20;216:9; 217:3;218:13,19; 219:7,7,8,10;220:7; 228:15;243:23 ways (10) 58:18;73:1;111:6; 115:4;116:20;162:4; 193:17;204:9;211:6; 239:20 wear (1) 203:11 wearing (2) 144:21;191:21 weather (1) 190:11 weather's (1) 190:10 web (5) 8:16;12:15;34:21;</p>
V			W	
<p>vacancies (2) 101:23;102:9 vacancy (1) 102:7 vacant (2) 102:1,11 vaccines (1) 80:3</p>			<p>wages (5) 26:24;70:1;156:9; 215:19;216:5 wait (16) 7:16;11:15;15:8; 34:24;40:7;44:10; 66:1;94:9;127:13; 128:3;131:7;177:3,3; 204:13;205:23; 223:17 waited (2) 40:6;44:19 waiting (5)</p>	

<p>99:20;237:8 WebEx (5) 8:20;12:19;103:24; 177:12,14 website (10) 7:13;8:8;11:12; 12:7;79:9;80:22; 96:13;99:19;103:1; 245:17 weeding (3) 130:13;138:15; 235:1 weeds (1) 64:2 week (3) 103:1;188:16,16 weekends (1) 86:15 weeks (4) 63:9;102:6;188:12, 13 weigh (1) 52:2 welcome (4) 36:10;47:19;103:5; 200:22 welcoming (1) 103:10 well-crafted (1) 14:20 well-paying (1) 28:14 well-performing (1) 185:23 weren't (6) 17:11,25;55:1; 130:14;143:6;224:3 West (5) 37:5;66:7,10,12,15 Western (5) 102:21;106:25; 214:10,16,22 what's (27) 47:2;61:10;63:11; 70:11;73:25;89:24; 97:24;99:3;117:10; 119:13;121:20; 123:10,13;125:22; 132:13;139:1;141:10; 149:11,13;164:18,20; 181:17;183:2;189:24, 24;209:25;229:16 wheat (1) 174:3 wheel (2) 123:8;216:24 whenever (1) 213:25 White (2) 7:4;11:3 white-hat (4) 110:4;120:6,9; 142:11</p>	<p>whole (17) 17:18;42:7;48:16; 54:8;63:16;94:24; 96:22;97:10,13; 109:13;136:21;146:9; 151:18;164:4,6; 165:5;213:14 who's (3) 20:9;209:23;215:2 whose (1) 51:15 who've (1) 69:4 WICK (5) 14:3,4;50:10;75:9; 84:12 wide (5) 14:18;46:18;111:6; 112:4;208:9 widely (1) 81:15 willing (2) 64:6;173:12 willingness (1) 63:10 win (1) 243:16 wind (1) 210:15 Wine (1) 112:17 Winegrape (2) 107:5;112:17 Winters (4) 201:3,6,9,12 wire (1) 189:9 wish (3) 53:22,22;54:25 wishes (1) 9:14 within (16) 14:24;27:5;68:10; 94:21;97:3;116:21; 121:8;153:25;202:10, 15;207:10,11;216:17; 217:19;230:15,24 without (23) 20:5;22:13;27:22; 37:8;39:15;50:12,13, 16;95:4;105:17; 106:7;124:16;127:2; 136:6;151:20;154:23; 167:23;170:11,24; 198:8;204:3,15; 211:20 witnessed (2) 63:8;70:18 woman (1) 162:23 Wonderful (1) 66:12 wondering (3)</p>	<p>43:8;90:25;100:10 wording (1) 228:7 words (4) 14:7;131:13; 133:22;163:1 work (103) 15:21,23,23,23; 16:24;19:6;20:18; 23:5,22,24;32:8,20; 35:16;37:16,20; 40:15;42:17;43:8,9; 46:16;48:7;51:15; 52:1;54:11,13,14; 55:14;56:15;58:4; 65:5;68:16,16;69:11, 18;70:8,15;71:24; 72:16,25;73:11;74:7; 80:8,14;82:11;85:16; 86:7,11,17;87:4;88:4, 5;91:10;97:6,25; 107:12;118:4,5; 125:13;131:12,18,25; 132:2;133:12;137:6, 7;138:5;141:20,22; 148:9;152:4,4; 157:20,21;158:12,16; 159:21;160:22; 161:25;163:14;164:1; 168:7;169:14;170:22, 23;172:2,13,16; 174:11;175:16,22; 181:8,13,13;182:10; 183:16;184:12; 186:23;187:12; 195:11;200:21; 203:23;210:3;241:2 workable (1) 51:17 worked (9) 21:17;37:23;40:14; 97:19;98:13;111:9; 114:1;129:4;130:2 worker (37) 15:19;31:9;36:15; 37:23;39:14;45:18, 20;46:16;47:6;56:9; 68:15,25;70:17; 105:17;107:21;108:7; 114:21,22;115:24; 134:16;136:8,20,23; 140:3;154:1,4;157:2, 15,22;167:2;173:10; 194:5;207:7;211:9, 21;212:2,4 worker-based (1) 71:23 worker-informed (1) 71:22 workers (172) 14:8,8,9;15:14; 24:7,11;26:1,24;27:3; 30:18;31:18;32:18;</p>	<p>36:20,22,24;37:5,18, 19;38:5,10;39:8,20; 40:17;42:24;43:7,15, 22,22;44:9;45:17; 46:17,19,24;47:11,13, 15;56:4,16;57:1,6,8,9, 9,12;58:3,19;64:5; 67:4,11;69:18;70:8,9, 12,15;71:10,23;73:2, 7,15,20;74:5,6;79:5; 80:3;84:25;89:20; 90:23;91:2,12; 101:16,19;105:13; 107:1;113:9;115:14; 116:1;117:7;126:14; 127:17,22;129:14,21, 22;130:1,3,9,12,14, 21;133:2;135:15,17, 19,21;136:1,11,12,13, 25;137:2,4,12,25; 138:2,4,6,18,19,25; 139:22;140:4;141:6, 25;143:13,21,23; 147:9;149:21;150:2; 152:14;154:18,20; 156:17;158:4,23; 161:18;166:20,21,23; 167:8;168:2,3,9,16, 25;173:24;174:6; 179:14;181:4;185:5, 11,15;186:21;191:4; 193:13,15;195:6; 199:5,14,18;200:12, 12,20;207:8,11; 208:15;209:7,12,22; 211:13;212:7;215:16; 217:16,18;218:14; 219:8;220:6;221:16; 223:25;224:2;228:16; 234:17 workers' (1) 16:6 worker's (2) 31:13;115:7 worker-safety (1) 167:6 workforce (18) 27:25;69:18,19; 142:22;156:11; 157:18,19;158:19; 160:6,14,15,25;161:2, 4,9,14,17;198:5 workforces (1) 32:9 working (53) 9:23;20:9;21:20; 23:25;27:23;30:13; 40:25;52:15;54:12; 56:18,23;62:25;64:8, 9;72:22;79:3;80:10; 86:14,15,15;87:5; 98:15;100:17;102:15; 107:19;112:5;114:4;</p>	<p>130:9,14,15;136:17; 139:21;149:6;160:19; 165:10;166:1;167:8; 171:21;173:4,7,24; 174:6;178:17;195:1; 205:14;216:19;221:7; 228:2;229:9;234:10; 236:11;237:7;245:3 working-class (1) 57:2 workload (2) 89:5;101:24 Workplace (88) 16:19;21:19,24; 23:16;24:11,13; 25:19;36:19,21,24,25; 37:3;38:8,12,20; 39:11,16,20;40:1,4, 18;43:15,21;44:7; 45:12,18,19,20;54:13; 55:20;56:6,7,9,20; 57:13,18;58:14; 66:20,24;67:1,7,9,14, 18,20;70:4,5,13; 71:14;72:11;73:6; 80:10,15;81:8,22; 82:1,11,20,23,24; 83:5;86:3;89:13,25; 90:7;91:8,13;95:6,24; 96:8,17,19;98:2,5; 99:4,15,20,25;100:3, 12,19,20;133:8; 136:5;186:22;187:1; 222:23;240:5 workplaces (5) 50:12,14,14;82:14; 95:2 workplace-violence (1) 101:13 works (12) 33:5;40:21;64:12; 85:3;97:8;113:7; 169:13;170:19;187:3; 193:22;196:19; 215:13 work's (1) 122:19 Worksafe (4) 46:2,11;47:9;72:13 workshop (1) 193:25 world (17) 61:8;64:10;97:3; 105:1;132:14,22; 141:12;142:7;145:17; 164:2,8;169:23; 188:21;195:8;206:18, 20;220:3 world's (1) 68:9 worldwide (1) 105:5 worried (2)</p>
--	---	--	---	---

<p>43:17;115:20 worries (1) 82:4 worry (6) 37:15;42:20;73:16; 191:23;209:6;212:6 worse (3) 73:9;115:1;116:3 worst (1) 110:10 worth (3) 219:25;241:4,6 worthy (2) 175:19,20 wound (2) 189:11,16 wrap (3) 128:12;172:5; 204:17 Wright (5) 46:1,5,7,9,11 written (9) 19:14;20:1,20,25; 30:13;32:7;60:8; 75:15;179:17 wrong (4) 136:1;137:20; 153:1;211:3 wrote (1) 162:20</p>	<p>36:15;39:13;40:6,15; 60:13;63:1,2,9,16; 64:12;65:5,6,7;72:21; 85:3;88:1;103:9; 107:6,11,20;120:8; 149:6;157:23;179:6; 180:20;183:4,5; 187:3;193:1;216:19, 25;220:12;231:2; 232:19 yelled (1) 41:3 yesterday (1) 43:11 YouTube (1) 163:24</p>	<p>13th (1) 80:21 14 (2) 173:20;184:19 15 (3) 88:1;130:21;216:19 15,000 (2) 26:10,14 150 (1) 25:23 15-day (1) 93:20 15-minute (2) 101:7;103:14 16 (2) 6:2;202:15 16-foot (1) 202:21 17 (1) 34:25 175 (1) 64:12 180,000 (1) 106:25 18497 (1) 182:14 18th (1) 79:16 19 (1) 36:15 1960 (1) 105:6 1978 (1) 30:21 1995 (2) 16:20;17:3</p>	<p>37:2;72:16 2015 (2) 17:8;33:18 2016 (6) 15:13;17:14;20:3; 33:19;50:20;51:7 2017 (3) 15:17;44:10;173:18 2019 (1) 201:15 2020 (1) 102:18 2021 (3) 27:17;106:22; 203:14 2022 (4) 40:20;96:6;173:18; 197:20 2023 (4) 6:2;50:20;51:7; 245:15 2027 (2) 204:11,15 2050 (1) 104:24 20th (2) 79:6;245:15 22nd (1) 102:17 23 (1) 107:20 240 (1) 107:21 24-hour (2) 41:20;44:13 25 (1) 228:6 25-pound (1) 217:2 26 (1) 184:18 28 (1) 15:17</p>	<p>3441 (7) 62:8;186:8;196:25; 198:14;219:1,7;242:8 3441b (1) 200:14 35 (1) 107:6 350,000 (1) 64:10 360-degree (1) 205:4 3rd (1) 79:5</p>
	Z			4
	<p>Zealand (5) 132:15;157:4,25; 158:2,3 Zeitz (7) 65:19,22,24;66:3; 195:25;196:3,5 zero (9) 16:22;60:15; 120:17;170:25;183:9; 203:17,17,18;205:2 Zoom (5) 103:20,25;106:5; 177:12,13</p>	<p>2 (1) 204:2 2,000 (2) 57:9;64:11 2,500 (3) 27:6,15;216:4 2.6 (1) 197:21 2:00 (1) 43:4 2:30 (2) 176:16,20 20 (4) 75:16;103:9;179:6; 197:10 20- (1) 217:2 200 (3) 27:13;60:14,15 2000 (1) 105:6 2007 (1) 62:25 2010 (2)</p>	<p>30 (5) 20:10;158:2;166:4; 176:11,16 30,000 (1) 26:11 300 (1) 57:17 30-minute (2) 104:18;172:4 31 (1) 63:21 31st (1) 79:15 324 (1) 57:6 33 (2) 17:15;21:18</p>	<p>4 (2) 60:14,15 4,442.94 (1) 203:15 40 (4) 64:9;107:11;111:1; 197:11 40,498 (1) 203:16 42 (2) 77:18,20 45 (2) 83:16;193:1 45-day (7) 17:16,19;50:18; 79:6,15;93:4,24 46 (4) 63:1,2;180:20; 183:4 47 (5) 17:19;52:19;54:6; 63:19,20 483 (1) 34:14 4th (1) 102:19</p>
Y	1	2	3	5
<p>Yancy (10) 107:17;118:24; 129:24;135:16; 137:16,19;227:4,17; 228:4;235:14 Yancy's (1) 134:5 Yap (18) 107:17;117:12; 128:9,21;129:18; 130:5;131:21;132:4; 137:23;148:17,24; 173:16;226:20; 228:11,19;229:11,14; 233:12 Yay (1) 76:18 year (20) 25:23;36:23;37:22; 55:24;56:1;64:11; 85:24;88:15,20; 89:13,14,14,14;96:8; 99:1;141:18;183:9; 187:7;188:12;189:5 yearly (1) 71:16 years (45) 15:17;16:8,16;17:8, 25;20:10;21:18;27:5; 33:5;34:16;35:1;</p>	<p>1 (4) 77:18,19;92:2; 204:2 1,000 (1) 26:23 1.2 (1) 96:8 1.4 (1) 14:10 10 (3) 33:13;105:1;130:20 10:00 (1) 6:2 100 (4) 183:9;203:24; 206:13,14 100,000 (1) 184:18 12 (1) 65:7 12:00 (1) 43:4 12:04 (1) 103:15 12:20 (1) 103:16 120 (1) 140:10</p>			<p>50 (3) 26:12;27:17;157:23 500 (1) 64:7 501c3 (1) 215:12 50-year-old (1) 218:12 510-868-2730 (2) 8:8;12:7 5155 (1) 80:6 5199 (1) 79:25 553 (1) 101:12 58 (2) 64:13;182:3</p>

589.57 (1) 203:15 597 (1) 103:2				
6				
6:30 (1) 40:20 60 (1) 104:25 60-percent (1) 216:5 686 (1) 101:16				
7				
75 (3) 57:17;59:6;105:3 770 (1) 36:14 7-Eleven (1) 80:14				
8				
8 (11) 49:1;63:1;68:7,19; 80:6;186:8;196:25; 198:14;204:10; 214:21;242:7 8,000 (1) 26:23 80 (2) 26:17;203:22 80-year-old (1) 218:13 85 (1) 17:16				
9				
9:35 (1) 22:4 90 (1) 165:17 911 (4) 17:1;38:23;41:3,7				