



Transcript of Virtual Public Hearing Day 2

Thursday, August 26, 2021

EPA Hearing

www.trustpoint.one www.aldersonreporting.com 800.FOR.DEPO (800.367.3376) Scheduling@Trustpoint.One

Reference Number: 106884

1	UNITED STATES
2	ENVIRONMENTAL PROTECTION AGENCY
3	
4	PUBLIC HEARING ON THE
5	REVISED 2023 AND LATER MODEL YEAR
6	LIGHT-DUTY VEHICLE GREENHOUSE GAS EMISSIONS STANDARDS
7	DOCKET NUMBER EPA-HQ-OAR-2021-0208
8	
9	9:30 a.m.
10	Thursday, August 26, 2021
11	
12	(Virtual Webcast)
13	
14	
15	
16	
17	
18	
19	
20	Room 2080
21	101 7th Street, NW
22	Washington, D.C. 20407

- 1 On behalf of the Environmental Protection Agency:
- 2 ALEJANDRA NUNEZ, Deputy Assistant Administrator for
- Mobile Sources, Office of Air and Radiation
- 4 MICHAEL OLECHIW, Light Duty Center Director
- 5 Office of Transportation and Air Quality
- 6 Speaker Block 1:
- 7 MARIE VENNER, Small Business Alliance
- 8 MARILYN HALL
- 9 JENNY CHURCHILL
- 10 MARTIN ALLEN
- 11 ANN HARVEY, Climate Health Now
- 12 MARGUERITE PENNOYER
- 13 PHYLLIS TERWILLIGER, United Methodist Women
- 14 CATHERINE GAROUPA WHITE
- 15 DEB BJORK
- 16 FRANK GRANDA
- 17 JACK HOLMGREEN, SparkeTap Water Company
- 18 NATALIE PIEN, Loudon Climate Project
- 19 CARA FLEISCHER, United Methodist Climate Justice
- 20 DAVE COOKE, Union of Concerned Scientists
- 21 DODIE HAWKINS
- 22 MICHEL HARTRICK, Alliance for Automotive Innovation

- 1 Speaker Block 1:
- 2 MARY ANN BAIER
- 3 DOUGLAS DURANTE, Clean Fuels Development Coalition
- 4 MARK COOPER, Consumer Federation of America
- 5 Speaker Block 2:
- 6 LUKE TONACHEL, Natural Resources Defense Council
- 7 KENT SMITH
- 8 RICHARD NEWHOUSE
- 9 VICTORIA GILLET
- 10 THOMAS HOLIDAY, @VehiclesHybrid
- 11 LEAH WISTE, Michigan Interfaith Power & Light
- 12 MARIO GRECO, The Aluminum Association's
- 13 Transportation Group
- 14 REEM RAYF, BlueGreen Alliance
- 15 DOUG HOLMGREN
- 16 ZACH PISTORA, Sierra Club
- 17 JACK DARIN, Sierra Club, Illinois Chapter
- 18 JACKIE GARCIA MANN, 350 Contra Costa
- 19 TRACY SABETTA, Moms Clean Air Force
- 20 RITA L. SMITH, United Methodist Women and Poor
- People's Campaign
- 22

- 1 Speaker Block 2:
- 2 LYNN RAMBO-JONES
- 3 CINTHIA MOORE, Moms Clean Air Force
- 4 LINDA STOUT, Moms Clean Air Force
- 5 TRACY BABBIDGE, National Association of Clean Air
- 6 Agencies
- 7 AFTERNOON SESSION
- 8 Speaker Block 3:
- 9 BILL BRADLEE, Interfaith Power & Light
- 10 JOSE ACOSTA, LVEJO
- 11 DEBORAH BAKKER, Hyundai America Technical Center, Inc.
- 12 LAURIE HOLMES, Motor & Equipment Manufacturers
- 13 Association
- 14 REPRESENTATIVE PADMA KUPPA, Michigan State House
- 15 MELINDA FLEMING
- 16 JOHN LINDER, National Corn Growers Association
- 17 FREDERICK TRAN
- 18 QIUNTA WARREN, Consumer Reports
- 19 WILL ANDERSON, Sierra Club
- 20 SAM SPENCER, City of Charlotte
- 21 CYNTHIA WILLIAMS, Ford Motor Co
- 22 NICOLE MARCOT, Moms Clean Air Force

- 1 Speaker Block 3:
- 2 DARIEN DAVIS, LCV
- 3 STEPHEN WYMAN, Evolving Electric Motor Company
- 4 JANET CHAPMAN, Citizens' Climate Lobby
- 5 LISA TANAKA, South Coast Air Quality Management
- 6 District
- 7 ANTHONY WITT
- 8 TAISIA STURZA
- 9 Speaker Block 4:
- 10 Sarah Rees, South Coast Air Quality Management
- 11 District
- 12 TIMOTHY MINOTAS, Sierra Club Michigan Chapter
- 13 JUDI EGBERT, UUFR
- 14 JEFFREY GROSS, Sierra Club (Volunteer)
- 15 ERANDI TREVINO
- 16 JP THOMAS, Voice of the People
- 17 SUSIE ROBERTSON
- 18 CLAIRE RICHARDS, Alliance of Nurses for Healthy
- 19 Environment
- 20 PAUL OSBOURN, Westport WING
- 21 TERRY McGUIRE
- 22 BRIAN LAUGHLIN, ZF Group

- 1 Speaker Block 4:
- 2 NICK TROMBETTA, League of Conservation Voters
- 3 EMILY HOPKINS
- 4 VALENCIA BEDNAR
- 5 NATALIR VILLALPANDO PAER
- 6 RICHARD ECKMAN
- 7 Speaker Block 5:
- 8 ELIZABETH BRANDT, Moms Clean Air Force
- 9 DOROTHY BRANDT, Moms Clean Air Force
- 10 PETER BRANDT
- 11 VINH DANG, Bridge Beyond
- 12 COLUMBA SAINZ, Moms Clean Air Force
- 13 EDUARDO SAINZ, MFV
- 14 KELLY FLEMING, Zero Emission Transportation Association
- 15 ALICE HENDERSON, Environmental Defense Fund
- 16 MADELINE OLIVER, Better World Group
- 17 DR. JUSTIN MOG, Union of Concerned Scientists
- 18 MARC DREHSEN, Union of Concerned Scientists
- 19 MICHAEL PETELLE, Union of Concerned Scientists
- 20 ROBIN HANKIN, Union of Concerned Scientists
- 21 PAUL AMEN, Union of Concerned Scientists
- 22 PHILLIP CUNY, Retiree

1	Speaker Block 5:
2	WILLIAM DAVIES
3	SUZANNE LLEWELLYN
4	MOLLIE MICHEL, Environmental Protection Network
5	CONNIE KING
6	ROBIN GUILLOT
7	KAREN MELTON
8	EMERSON WILLIAMS
9	JAMES NOYES
10	DANA GERSTEN
11	LANGSTON VERDIN
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	

- 1 PROCEEDINGS
- MS. THOMPSON: Good morning and welcome to the
- 3 United States Environmental Protection Agency's Virtual
- 4 Public Hearing for the Revised 2023 and Later Model
- 5 Year Light-Duty Vehicle Greenhouse Gas Emissions
- 6 Standards.
- My name is Kayla Thompson from Abt Associates,
- 8 contractor to the U.S. EPA.
- 9 We are now ready to begin, and I'll turn it over
- 10 to EPA to get us started.
- MR. OLECHIW: Good morning. On behalf of the
- 12 Environmental Protection Agency and the Office of Air
- 13 and Radiation, I'd like to welcome you to the second
- day of our Public Hearing on EPA's Proposed Light-Duty
- 15 Vehicle GHG Program and thank you again to our
- 16 contractor, Abt Associates, who will help with
- 17 administering the Virtual Public Hearing today.
- I am Michael Olechiw, Director of EPA's Light-Duty
- 19 Vehicle Center in the Office of Transportation and Air
- 20 Quality, and I will be the presiding officer for
- 21 today's hearing.
- Also with me on the panel during the course of the

- 1 hearing are Bill Charmley, Robin Moran, and Tad Wysor
- from the Office of Transportation and Air Quality, and
- 3 Mark Kataoka and Seth Buchsbaum from EPA's Office of
- 4 General Counsel.
- 5 The purpose of this hearing is to receive oral
- 6 testimony from the interested parties regarding EPA's
- 7 Proposed Revisions to the Light-Duty Greenhouse Gas
- Emissions Standards. 8
- As you know, during his first days in office,
- 10 President Biden issued a series of Executive Orders
- 11 that set a clear direction for the EPA and this
- 12 Administration to protect public health, address the
- 13 climate crisis, and ensure environmental justice.
- 14 These Executive Orders gave federal agencies
- 15 direction to use the best science, protect the
- 16 environment and public health, ensure access to clean
- 17 air for everyone, reduce greenhouse gas emissions, and
- 18 bolster resilience to the impacts of climate change.
- 19 Executive Order 13990, issued on President Biden's
- 20 first day in office, directed all agencies to review
- 21 their regulations, orders, guidance, and policies to
- 22 ensure, among other goals, that we are promoting the

- 1 protection of public health and the environment,
- 2 including the goal of reducing greenhouse gas
- 3 emissions, and to prioritize environmental justice.
- 4 Under this Executive Order, EPA was asked to
- 5 review the April 2020 action by the previous
- 6 Administration to weaken the light-duty vehicle
- 7 greenhouse gas emissions standards that had been in
- 8 place since 2012.
- 9 EPA's carefully reviewed the record and assessed
- 10 more recent information and the ongoing technological
- 11 progress in the auto industry in both internal
- 12 combustion and electrified technologies.
- 13 After considering this robust technical record and
- under EPA's authority under the Clean Air Act, EPA has
- 15 now proposed a revised set of more stringent GHG
- standards, emissions standards that would apply to 2023
- to 2026 Model Year light-duty vehicles.
- These proposed standards are the subject of
- 19 today's hearing.
- 20 As we show in the rulemaking documents that are
- 21 now available in the Federal Register and EPA's website
- 22 and in the Public Docket, there is strong technical

- 1 evidence that the auto industry is in a position to
- very quickly get the Clean Cars Program back on track
- 3 with annual GHG emissions reductions similar to those
- 4 that had been planned for the past decade.
- In fact, by 2026 the proposed standards will
- 6 exceed the most stringent standards of the original
- 7 2012 program.
- 8 We project that the auto industry would meet this
- 9 technical challenge at a reasonable cost, that the
- offsetting gasoline savings to vehicle owners would be
- 11 substantial, and the reductions in greenhouse gas
- emissions would be large, and that the proposed
- 13 standards would achieve significant public health
- 14 benefits for Americans.
- We are at the same time all increasingly aware of
- the urgency of the climate crisis and its sobering
- 17 effects almost daily in the news, a reality that the
- 18 international climate scientists just brought into even
- 19 sharper focus in their major report earlier this month.
- 20 EPA and this Administration are very clear that
- these proposed revised emissions standards, important
- though they are, would not in themselves result in

- 1 sufficient emission reductions for the monumental task
- 2 at hand.
- For that reason, the Administration has announced
- 4 plans to develop a broader and longer set of
- 5 regulations for light-duty vehicles that are planned to
- 6 be proposed during the next year.
- 7 As laid out in Executive Order 14037, issued
- 8 earlier this month, the Administrator of the
- 9 Environmental Protection Agency shall, as appropriate
- 10 and consistent with the applicable law, consider
- beginning work on rulemaking under the Clean Air Act to
- 12 establish new multi-pollutant emissions standards,
- including for greenhouse gas emissions for light- and
- medium-duty vehicles, beginning with Model Year 2027
- and extending through and including at least Model Year
- 16 2030.
- 17 As EPA embarks on this future set of longer-term
- 18 standards, we look forward to public engagement and
- 19 stakeholder input.
- We are conducting this hearing in accordance with
- 21 Section 307(d) of the Clean Air Act and this hearing
- 22 provides the forum for interested persons to submit

- 1 oral presentations.
- We have scheduled time for all of those who have
- 3 registered using the online registration process. We
- 4 will continue today until all speakers have been heard.
- We appreciate that holding a public hearing
- 6 virtually is relatively new, but EPA is committed to
- 7 making use of evolving technologies and ensuring that
- 8 we hear from all who wish to provide oral testimony.
- 9 As a reminder, the public also has an opportunity
- 10 to submit written comments through September 27, 2021.
- 11 For the two days of this hearing, we have had
- 12 almost 200 people register to present testimony
- 13 yesterday and today.
- 14 This hearing is being recorded and the transcript
- will also be available electronically on the
- 16 regulations.gov website EPA-HQ-OAR-2021-0208.
- We expect to post the recording of the hearing in
- the next few days on the website for this rule.
- 19 This hearing will be conducted informally and the
- Formal Rules of Evidence do not apply. However, as
- 21 presiding officer, I am authorized to strike from the
- 22 record statements which are deemed irrelevant or

- 1 needlessly repetitious to enforce reasonable limits on
- the duration of statements of any speaker.
- 3 Speakers will be allowed to make oral statements
- 4 which they may later expand in writing for the record.
- 5 We request that speakers state their names and any
- 6 affiliation prior to making their oral statements and
- 7 to limit their testimony to three minutes. When a
- 8 speaker has finished their presentation, members of
- ⁹ this panel may ask questions concerning the issues
- 10 raised in the testimony.
- Our contractor, Abt Associates, will be
- 12 facilitating the lineup of speakers and helping to keep
- 13 testimony to three minutes. We recognize that this is
- 14 not a lot of time and appreciate everyone's cooperation
- in allowing us to give everyone a chance to speak
- 16 today.
- Please note that the EPA has distributed a list
- 18 and a tentative order of those registered to speak
- 19 today and we may make slight adjustments through the
- 20 hearing for accommodations.
- We plan to take a 30-minute lunch break around 12
- 22 p.m. today and an afternoon break around 3 p.m.

- 1 Should there be members of the press with further
- ² questions about today's hearing, please contact Erin
- 3 Birgfeld at birgfeld.erin@epa.gov.
- With that, I will now ask Kayla to start the
- 5 hearing with our first set of speakers.
- 6 MS. THOMPSON: Thank you.
- Before we begin, we'd like to go over some
- 8 logistics for today's public hearing.
- 9 As a reminder, all attendees are muted
- 10 automatically. If you are speaking today, you will
- 11 receive a notification on your screen that you are
- being promoted to the role of panelist shortly prior to
- 13 your speaking time. You must accept that invitation to
- 14 be able to unmute when you are called to testify. This
- will also allow you to turn on your camera which we
- 16 encourage you to do.
- 17 Speakers connected by telephone should unmute
- their phones when called to testify.
- 19 If you're having technical difficulties, please
- send an e-mail to public hearing@abtassoc.com or call
- 919-294-7712. If you are not registered to speak but
- you would like to, please send an e-mail to

- 1 public_hearing@abtassoci.com or call 919-294-7712.
- Now we will begin our public testimony. The
- 3 expected speaking order is currently displayed on the
- 4 screen. We ask that each person limit their verbal
- 5 testimony to three minutes. We encourage you to
- 6 provide your full written testimony and any additional
- 7 comments of any length to Docket Number EPA-HQ-OAR-
- 8 2021-0208 on regulations.gov.
- 9 I will be introducing each speaker in turn.
- 10 Please speak slowly and clearly so our court reporter
- 11 can record these proceedings accurately.
- 12 Speaker Block 1
- MS. THOMPSON: The first speaker will be Maria
- 14 Venner. You may now unmute and please state your name
- and affiliation for the record.
- MS. VENNER: Marie Venner. I'm Director of the
- 17 Small Business Alliance.
- 18 As a mom and a National Academy TRB Researcher who
- 19 has done close to 50 projects under these programs and
- who still chairs TRB AHC-10, one on environmental
- 21 management and decarbonization, I thank you for your
- 22 proposal to strengthen federal greenhouse gas emissions

- 1 standards for passenger cars and light trucks by
- setting stringent requirements for reductions through
- 3 Model Year 2026.
- 4 However, it is important to finalize standards for
- 5 Model Years 2023 to 2026 before working on pollution
- 6 standards for later years.
- 7 Also, please go with your Alternative Number 2 as
- that would put 400,000 extra EVs on the road by 2026 8
- and result in a 130 million metric tons fewer GHG
- 10 emissions.
- 11 I was concerned to see and urge you not to go with
- 12 your initial preferred alternative as it includes some
- 13 loopholes to automakers that may otherwise undermine
- 14 strong pollution reduction targets.
- 15 EPA should finalize the strongest possible option.
- 16 We must do better and go further. I used to supervise
- 17 environmental specialists at a state DOT. So I have
- 18 insight into what is considered in transportation and
- 19 regulatory decision-making and what is not.
- 20 Please hear me. There has been an avalanche of
- 21 research this past decade on the harms from vehicle
- 22 emissions and their connection to every physical,

- 1 cognitive, and emotional condition where inflammation
- 2 is a component because fossil fuel emissions of all
- 3 types cause this inflammation, cause 21 percent of
- 4 dementia and Alzheimer's cases and vastly increase the
- 5 risk of asthma and autism.
- 6 My kids have asthma and my son is on the spectrum.
- 7 Denver was the worst polluted city in the world one day
- 8 this summer and has had over 50 days of dangerous air
- 9 pollution, keeping us all indoors.
- 10 As a public servant and public policy researcher,
- 11 I was shocked at the extent of the health effects
- evidence, deaths from cancer, organ damage, as well as
- the most severe impacts to quality of life, learning,
- 14 anxiety, depression, illness, cognitive declines,
- 15 suicide, that I knew were not being considered in
- decisions to fund projects.
- I could use up my entire time just giving quotes
- 18 from doctors, medical researchers saying there is no
- 19 safe level, no safe level of these pollutants.
- 20 Completely aside from the severe climate risk we
- 21 are facing which justify getting off of fossil fuels
- 22 now and not registering one more fossil fuel vehicle

- 1 and making every sort of healthy transportation
- 2 alternative widely available, the health risks
- 3 overwhelmingly prove that this path should be taken.
- 4 A date should be set when no more fossil fuel
- 5 vehicles can be registered and used on public roads.
- 6 Public funds for widening should be paused this decade
- 7 and transportation funds should be spent on ensuring
- 8 that everyone has access to universal broadband and
- ⁹ transportation options, only investing in clean and
- 10 healthy ones, many, many lives to condone it.
- 11 Thank you. A recent literature review of air
- 12 pollution health effects research is submitted for the
- 13 record.
- MS. THOMPSON: Thank you for your comment.
- The next speaker will be Marilyn Hall. Marilyn,
- 16 you may now unmute and please state your name and
- 17 affiliation for the record.
- MS. HALL: Good morning. My name is Marilyn Hall,
- and I appreciate the opportunity to speak in support of
- the proposed rule. I'm testifying as a private
- 21 citizen. I am retired and I live in Maryland. I
- learned of this hearing through Consumer Reports.

- 1 My testimony is motivated by the climate crisis
- 2 and our urgent need to dramatically reduced energy
- 3 emissions that contribute to global warming.
- I support the Administration's swift action on
- 5 clean cars, but I urge the EPA to adopt the second
- 6 alternative of this rule. That alternative would
- 7 deliver greater savings to consumers and eliminate
- 8 loopholes for automakers.
- 9 I don't go in for flashy cars and I'm not an early
- adopter of new technologies typically. I drove my last
- 11 car, a beat-up minivan, for almost 20 years before
- 12 thinking about a new car. As I considered a
- 13 replacement, I felt compelled to switch to a hybrid
- and, if possible, an electric vehicle so that I could
- reduce the pollution burden that my driving places on
- 16 the rest of the world.
- I am fortunate that I was able to purchase a plug-
- in hybrid car that meets my needs, is a great car that
- 19 I've already taken on a few road trips. I only wish
- that the battery would carry my car farther between
- 21 charges so that I would not need to rely on gasoline as
- 22 much as I do.

- 1 There's a huge market for electric cars that will
- become even larger as the technology improves. I have
- 3 found tremendous interest in hybrid electric cars since
- 4 I started driving mine. Friends have asked to check
- out my car to see whether it would work for them.
- 6 Strangers approach me at charging stations with
- questions about the technology. Some folks have
- 8 commented longingly that they would like to own an
- 9 electric vehicle but they need prices they can afford.
- 10 The proposed rule can help that to happen for American
- 11 consumers. People want electric cars.
- We live privileged lives in this country and our
- 13 continued use of polluting vehicles is damaging the
- environment, contributing to global warming and causing
- 15 frightening deadly weather events that have already
- 16 caused many deaths in this country and around the
- world.
- This proposed rule, especially the EPA's second
- 19 alternative, is an essential step towards slowing
- 20 climate change.
- I urge you to move forward with the second
- 22 alternative as the final rule.

- 1 Thank you for your attention. I appreciate this
- ² opportunity.
- MS. THOMPSON: Thank you for your comment.
- 4 The next speaker is Jennie Churchill. Jennie, we
- 5 do not currently see you among the list of attendees.
- 6 However, if you have joined using a different name, we
- 7 would invite you at this time to raise your hand and if
- 8 you have called in, you may raise your hand by dialing
- 9 Star 9 on your phone.
- 10 (No response.)
- MS. THOMPSON:
- MS. THOMPSON: We will now move on to the next
- 13 speaker on our list.
- 14 The next speaker is Martin Allen. Martin, you may
- 15 now unmute and please state your name and affiliation
- 16 for the record.
- MR. ALLEN: Good morning. Thank you for the
- opportunity to testify this morning.
- 19 My name is Martin Allen. I'm a real estate
- 20 attorney at DiFrancesco, Bateman in New Jersey, but
- 21 I'll be testifying today as a private citizen.
- I strongly support this Administration's efforts

- 1 to encourage production and use of clean cars and urge
- 2 the EPA to adopt the second alternative which would
- 3 deliver greater savings to consumers and eliminate
- 4 industry loopholes.
- I'm going to speak to you about my personal
- 6 experiences as an electric vehicle owner and the issues
- of upfront costs, range anxiety, and a need for
- 8 improved infrastructure.
- 9 Upfront costs. Yes, purchasing an EV is more
- 10 expensive than purchasing a petroleum-fueled car.
- 11 However, the cost savings for ownership of an all-wheel
- 12 drive SUV to an all-wheel drive EV have been
- 13 remarkable. I went from spending over \$200 per month
- in gasoline alone as compared with a nominal additional
- 15 cost to my home electricity of maybe \$30 a month, a
- 16 difference in cost that more than offset my higher
- monthly lease payments for my EV.
- 18 After that, I have zero maintenance charges on the
- 19 new car, no oil changes, no fuel changes, no filter
- 20 changes, no periodic scheduled maintenance costs, and
- 21 I'm saving more than the upfront costs on my "more
- 22 expensive electric vehicle."

- 1 Range anxiety. Did I have range anxiety? Oh,
- 2 yeah, I have range anxiety. Did I get over it? Yes,
- 3 very quickly. I live in the Watchung Hills, New
- 4 Jersey, and we get some inclement winter weather here.
- 5 So a four-wheel drive vehicle was a requirement.
- 6 My EV, which has dual motors, is set by me to get
- 7 approximately 250 miles on a complete charge, and I can
- 8 get over 300 miles fully charged. I charge my car
- 9 around once or twice a week. I installed a Level 2
- 10 240-volt charge in my garage in my townhome house at a
- 11 cost of less than \$300. I get a full charge at home in
- 12 around six hours, but I almost never charge from zero
- 13 at home.
- Let me tell you a story how I got over range
- 15 anxiety. Soon after getting my electric vehicle, I
- went on vacation and parked my car at the airport. On
- the way to the airport, I discovered that I had less
- than 60 miles left of estimated charge. What if the
- 19 estimate was wrong? What if there wasn't sufficient
- 20 charge to get home?
- So when I left the airport, I put on the standard
- regenerative braking, slowed my speed, used my brakes

- 1 probably a bit more frequently than I would have
- 2 normally, and I arrived at home with an estimated miles
- of more than what I started with. As for quick
- 4 charging stations, I have used a couple and within 15
- or 20 minutes, any short coffee break, my car has been
- fully charged. I'm over anxiety, no more range
- ⁷ anxiety.
- 8 Lack of infrastructure. Do we need fast charging
- 9 stations for we consumers' range anxiety? Absolutely,
- and I believe the Administration's plans will greatly
- 11 help.
- 12 Are single family homeowners at an advantage now
- over multifamily and multistory residential dwellers?
- 14 Absolutely. But with increased investments in
- infrastructure, incentives for petroleum retailers to
- 16 install charging stations, local land use incentives
- and the like, infrastructure can and will be built to
- 18 meet the needs of consumers.
- 19 Improved fuel economy standards by the EPA is but
- one way to put industry on a path to reduce greenhouse
- 21 gas emissions by encouraging development and sales of
- 22 electric vehicles.

- 1 EPA's strong car standards will drive down overall
- 2 pollution, spur technological electrification
- 3 innovation and drive down consumer costs.
- 4 The EPA should not accept a rule which with a weak
- 5 proposal and loopholes for the automaker industry.
- 6 There's no need to compromise. I therefore ask the EPA
- 7 to take action to set the strongest clean car standards
- 8 possible, reinstate the Obama/Biden federal standards,
- 9 and Alternative 2, and even stronger standards
- 10 thereafter.
- I'm more than happy to answer questions. If not,
- thank you very much for your time, and have a good
- morning.
- MS. THOMPSON: Thank you for your comment.
- The next speaker on our list is Ann Harvey. Ann,
- we do not currently have you listed among the list of
- 17 attendees. However, if you have joined using a
- different name, we would invite you at this time to
- 19 raise your hand, and if you have called in, you may do
- so by dialing Star 9 on your phone.
- 21 (No response.)
- MS. THOMPSON: We will now move on to the next

- 1 speaker.
- 2 The next speaker will be Marguerite Pennoyer. You
- may now unmute and please state your name and
- 4 affiliation for the record.
- DR. PENNOYER: Good morning. My name is
- 6 Marguerite Pennoyer, and I'm a physician specializing
- ⁷ in allergy, asthma, and immunology.
- 8 I also volunteer as Board Chair of the American
- 9 Lung Association in Maine and Vice Chair of the
- 10 American Lung Association of New England and the Mid-
- 11 Atlantic.
- 12 Thank you for the opportunity to speak with you
- today about this vital topic. My thanks also go to
- 14 President Biden and his Administration who know how
- 15 critical it is to tackle climate pollution from
- 16 transportation.
- This proposal and the broader actions on clean
- 18 cars from the Administration are helpful, but we need
- the most stringent possible clean car and truck
- standards to truly make good on President Biden's
- 21 commitments to address climate action and environmental
- 22 justice.

- 1 The transportation sector is the largest source of
- 2 greenhouse gas emissions in the United States.
- 3 Gasoline- and diesel-powered cars, SUVs, and the
- 4 increasingly-powerful pickup trucks pollute the air we
- 5 breathe and drive climate change.
- I'm a doctor, a parent, and a hybrid electric car
- owner who has benefited from the increasingly wide
- 8 choice of options for cars meeting or exceeding EPA's
- 9 standards as we try to make automotive choices that
- will protect my patients and my children's health.
- However, I wanted to share my husband's recent
- experience in trying to purchase a light-duty pickup
- 13 truck as just one example of the need for ever-stronger
- 14 standards.
- He had just retired last year and was looking for
- 16 a small truck to tackle a number of home construction
- 17 projects and canoeing trips. He searched long and hard
- to try to find an acceptable option for a light truck
- 19 that had zero or low greenhouse gas emissions, either
- 20 hybrid or all-electric. There were almost exactly zero
- 21 available options.
- 22 Pressure to innovate has been stymied for pickup

- 1 trucks by loopholes and lack of pressure on the
- 2 industry. These wildly popular and energy inefficient
- 3 pickup trucks now seem to be among the most common type
- 4 of personal vehicle seen on Maine's roads and the
- 5 nation's highways.
- Truck manufacturers have been bypassing so many of
- 7 the air quality protections that have been engineered
- 8 into their smaller cars. This is but one personal
- 9 example among so many of why stronger standards are
- 10 needed to drive innovation, ingenuity, and provide many
- 11 more clean truck and car options that don't further
- 12 jeopardize our clean air.
- 13 Please ensure that these standards don't include
- 14 any shortcuts or loopholes for automakers to cut
- 15 corners so that we see significant and genuine
- 16 reductions in greenhouse gas emissions.
- 17 Please do not allow unnecessary give-aways or
- 18 complex credit scheme for automakers that look good on
- 19 paper but that negate real-world benefits and delay
- 20 progress toward newer and cleaner technologies.
- I support all EPA efforts to reduce greenhouse gas
- 22 emissions for all cars, trucks, and larger vehicles

- 1 that will protect the health of my family and my
- ² patients.
- 3 The EPA must set much stronger standards covering
- 4 cars, SUVs, and light trucks through at least 2030 to
- 5 drive the transition to zero emission vehicles that the
- 6 nation needs and that President Biden has called for in
- ⁷ his Executive Order.
- 8 The EPA must finalize this rule to cover the Model
- 9 Years 2023 through 2026 and set up more health
- 10 protective standards beyond that.
- The EPA proposals are a necessary first step
- 12 toward addressing the previous Administration's
- 13 rollback of cleaner cars, but it's only a start.
- 14 Stronger standards are desperately needed.
- According to the Lung Association's Road to Clean
- 16 Air Report, a nationwide transition to zero emission
- vehicles, including passenger cars, buses, and heavy-
- duty vehicles, will provide \$72 billion in health
- benefits and a \$113 billion in climate benefits
- 20 annually by 2050. It would reduce dangerous air
- 21 pollution, especially for communities that live near
- 22 major roads, and in June, the Lung Association released

- 1 a poll showing that 70 percent of American voters are
- 2 in support of the Federal Government advancing policies
- 3 to encourage a nationwide transition to electric
- 4 vehicles.
- 5 So in conclusion, climate change is threatening
- 6 the health of my patients and my family. The Biden
- 7 Administration must use all available tools to reduce
- 8 carbon pollution. We must take immediate action at
- 9 every level to address climate change and reduce
- 10 greenhouse gas emissions.
- 11 Please finalize this proposal quickly and move
- 12 forward with even bolder greenhouse gas and fuel
- 13 efficiency standards for cars, light trucks, and SUVs
- 14 into the future that will speed up this truly vital
- 15 transition to zero emission vehicles.
- 16 Thank you.
- MS. THOMPSON: Thank you for your comment.
- The next speaker will be Phyllis Terwilliger. You
- may now unmute and please state your name and
- affiliation for the record.
- MS. TERWILLIGER: Thank you for providing an
- 22 opportunity to testify.

- I am Phyllis Terwilliger, a United Methodist
- Woman, a mother, and an elementary educator, and I
- 3 drive a car.
- 4 As adults, we breathe 16 times per minute. That's
- 5 48 breaths during this three-minute testimony. A child
- 6 breathes 25 times per minute. That's 75 breaths during
- 7 this three-minute testimony.
- I recently moved from Berle, Pennsylvania, to the
- ⁹ urban area of York, Pennsylvania. On average, a car or
- 10 truck passes by my house every three seconds. I live
- on a very busy road.
- 12 The American Lung Association states, "An
- estimated 30 to 45 percent of the people in North
- 14 American cities live or work near enough to a busy road
- to experience significantly higher levels of
- 16 pollution." This, of course, leads to increased rates
- of asthma and other respiratory illnesses.
- Low-income people and communities of color are
- often closest to highways and bear the greatest burden
- 20 from vehicle pollution.
- The EPA must, must set the strongest possible
- 22 federal vehicle emission standards to ensure we are

- 1 protecting families from pollution and reversing
- ² climate change.
- We as humans are spiritual creatures. The Hebrew
- 4 word for breath, Ruach, is the same word for spirit.
- 5 Air is the life force that brings all people into
- 6 existence beginning with their first breath.
- 7 Therefore, dirty air can compromise our spiritual
- 8 health.
- 9 Spirituality is not merely a belief and an
- 10 ultimate reality. It's a belief in the possibility
- that clean air is a basic human right available for
- 12 all. Our communities deserve clean, breathable air.
- 13 A healthy spiritual life is intimately connected
- 14 to the EPA's reducing dangerous greenhouse gas
- 15 pollution by setting the boldest possible emissions
- 16 standards.
- Take a deep breath. Thank you.
- MS. THOMPSON: Thank you for your comment.
- 19 The next speaker will be Deb Bjork. You may now
- unmute and please state your name and affiliation for
- 21 the record.
- DR. BJORK: Thank you for the opportunity to

- 1 speak.
- My name is Deb Bjork. I live in Fort Collins,
- 3 Colorado, a city which since 2008 is within the non-
- 4 attainment area due to surface ozone with a serious
- 5 rating by the EPA, but it's also rated as a best place
- 6 to live in the U.S. in various polls.
- 7 The incongruence in these two facts exemplifies
- 8 accelerated rate of climate change. In 50 of the last
- 9 57 days, I've received unhealthy air quality alerts.
- 10 Surface ozone forms in sunlight mixing with pollutants
- 11 made worse in high temperatures. The air has been
- 12 suffocating. The outdoor air is stifling, a heat dome
- with oppressive temperatures and pollution.
- I have asthma as do my children and grandchildren.
- 15 We are confined to our homes with air purifiers and air
- 16 conditioning just to be able to breathe and we're
- 17 fortunate to be able to do that.
- Our air is just one of the many catastrophic
- 19 impacts of climate change. Our children and
- grandchildren are inheriting a burning hot and polluted
- 21 world.
- The sobering and terrifying Sixth

- 1 Intergovernmental Panel on Climate Change Report
- released two weeks ago clearly describes our hellish
- 3 future unless we take immediate and bold action to curb
- fossil fuel emissions. 4
- 5 We must mitigate the worst of climate change. We
- 6 need the EPA to enact strong standards. I have a Ph.D.
- 7 in clinical psychology. Research shows that the
- effects of climate change place children at risk of 8
- mental health consequences, including PTSD, depression,
- 10 anxiety, phobias, sleep disorders, attachment
- 11 disorders, and substance abuse. These in turn can lead
- 12 to problems with emotional regulation, cognition,
- 13 learning, behavior, language development, and academic
- 14 performance. Together, these predispose adverse mental
- 15 health outcomes.
- 16 Climate change also affects adults with mental
- 17 health impacts and significant stress. Two recommended
- 18 coping strategies that reduce psychological impacts of
- 19 climate change are staying informed and taking positive
- 20 action towards change.
- 21 Of note, one suggested action is to buy an energy-
- 22 efficient or electric car.

- 1 Because the transportation sector is the largest
- 2 source of carbon pollution in the U.S., reducing
- yehicle pollution is essential for the fight for
- 4 climate change and clean air. Reducing pollution from
- 5 cars and light-duty trucks is crucial to improving air
- 6 quality.
- Moving quickly and decisively to zero pollution
- 8 vehicles paves the way for people to take action.
- 9 Please enact the strongest federal clean car
- standards through 2026 to meet ambitious pollution
- 11 reduction goals. Please eliminate loopholes for
- 12 automakers. Strong regulations puts them on track to
- sell millions of vehicles and sets us on the path to a
- 14 hundred percent zero emissions new vehicles sales by
- 15 2035.
- We have the technology. We have the science. We
- 17 have the large automakers posed to comply, and we have
- 18 the American public clamoring for change. Vehicle
- 19 pollution not only causes climate change but it also
- degrades air quality and threatens our health. Strong
- 21 regulations can give my grandchildren and all children
- 22 clean air and a trajectory towards a healthier climate.

- 1 Thank you.
- MS. THOMPSON: Thank you for your comment.
- 3 As a reminder, if you are speaking today, you will
- 4 receive a notification on your screen that you are
- 5 being promoted to the role of panelist shortly prior to
- 6 your speaking time. You must accept that invitation to
- ⁷ be able to unmute when you are called to testify. This
- 8 will also allow you to turn on your camera which we
- 9 encourage you to do.
- Speakers connected by telephone should unmute
- 11 their phones when called to testify.
- 12 If you are having technical difficulties, please
- send an e-mail to public_hearing@abtassoc.com or call
- 14 919-294-7712. If you are not registered to speak but
- 15 you would like to, please send an e-mail with your name
- and phone number to public_hearing@abtassoc.com or call
- 17 919-294-7712.
- The next speaker on our list is Frank Granda.
- 19 Frank, we do not currently have you listed among the
- list of attendees. However, if you have joined using a
- different name, we would invite you to raise your hand
- 22 at this time, and if you have joined by dialing in

- 1 today, you may raise your hand by dialing Star 9 on
- 2 your phone.
- 3 (No response.)
- 4 MS. THOMPSON: We will now move on to the next
- 5 speaker.
- The next speaker will be Jack Holmgreen. Jack,
- you may now unmute and please state your name and
- 8 affiliation for the record.
- 9 MR. HOLMGREEN: Thank you for this opportunity to
- 10 give my testimony on this subject. I make these
- 11 comments as a private citizen.
- 12 My name is Jack Holmgreen, and I live in Kirk
- 13 County, Texas. I am President and Founder of
- 14 SparkleTap Water Company, but I did serve as chief
- engineer on seagoing vessels for 38 years, so I'm very
- 16 knowledgeable about the importance of energy demand
- 17 management for the safety of our crew. I had to make
- sure we had sufficient energy onboard to make it to the
- 19 next port.
- I currently own and operate three vehicles with
- internal combustion engines used in my business. My
- 22 personal vehicle is a 2021 Toyota Sienna Hybrid and one

- of my company vehicles is a 2006 Toyota Sienna. So I
- 2 have personal knowledge about the relative difference
- 3 in fuel consumption of these two vehicles.
- 4 My '06 Sienna travels about 500 miles on 30
- 5 gallons of gasoline while my Hybrid Sienna will go that
- 6 far with 12 gallons. That comes out to about a 55
- 7 percent increase in efficiency. A fully electric
- 8 vehicle, however, such as the Tesla plug-in models,
- 9 while having zero gasoline emissions, is actually less
- 10 efficient due to the shorter range, reliance on
- 11 charging from the grid, which in Texas is
- overwhelmingly powered by natural gas and some coal
- with very little wind or solar.
- The effect is that the plug-in vehicles are
- 15 actually just replacing gasoline with some other fossil
- 16 fuels for the most part.
- 17 My comment is this. The plug-in vehicle is not
- adding efficiency unless it is coupled with a
- 19 requirement that it provides solar, wind, or hydrogen
- 20 power to charge it. With hybrid models, however, there
- is an immediate reduction in gasoline consumption and
- 22 pollution with no burden on the already delicate grid

- 1 as witnessed here in Texas last winter.
- Most plug-ins will charge at home in the evenings
- 3 when returning from work and this is at peak load
- 4 period. Some countries are already assessing huge
- 5 import duties for all-electric vehicles because it is
- 6 far more efficient to just burn gas in the car than it
- ⁷ is to rely on the grid which in many cases is fed
- 8 primarily by coal.
- Just to be clear, I support Proposal Number 2 in
- order to eliminate loopholes that the transportation
- industry will most certainly take advantage of, but
- with only the two proposals on the table, you're asking
- us do you want me to cut off both your hands or do you
- 14 just want me to cut off one? Given those two choices,
- 15 Number 2 is far superior.
- 16 I'm asking you to consider a third choice. How
- about offering us the hand, one that doesn't do more
- 18 harm than good?
- 19 Thank you for the time, and I yield.
- MS. THOMPSON: Thank you for your comment.
- The next speaker will be Natalie Pien. You may
- 22 now unmute and please state your name and affiliation

- 1 for the record.
- MS. PIEN: Hello. I am Natalie Pien, current
- 3 President of Loudon Climate Project, an Asian American,
- 4 and calling in from Leesburg, Virginia.
- 5 Thank you for the opportunity to share my thoughts
- 6 as a climate activist, former environmental scientist,
- 7 retired public school science teacher, owner of hybrids
- 8 and an EV since 2010, and biological grandmother to be
- 9 in January 2022.
- 10 I'm concerned about the future for my children, my
- grandchildren, and my over 1,000 middle school science
- 12 students.
- 13 Efforts to prepare our children to succeed in life
- 14 will be for naught unless we act to avoid the most dire
- 15 consequences of climate change. They all deserve a
- 16 livable planet without struggling to survive.
- 17 A livable planet can be achieved through net zero
- carbon emissions by 2050. This goal requires
- 19 Alternative 2 for 100 percent zero emissions from
- vehicles and power plants by 2035.
- In addition, Biden rejoined the Paris Agreement
- 22 and Alternative 2 is essential to meet the commitment

- 1 to cut greenhouse gas emissions in half by 2030.
- 2 Upon the early August release of the IPCC Six
- 3 Assessment, the UN Secretary General announced that the
- 4 world is in Code Red due to human-induced climate
- 5 change.
- 6 Where I live, Northern Virginia is now an air
- quality marginal non-attainment area due to excessive
- 8 ozone. Internal combustion engine vehicles, ICEs, emit
- 9 ozone precursors as well as other pollutants that harm
- 10 human health.
- I vividly recall the time I walked my now 33-year-
- old daughter in a stroller down a sidewalk in Leesburg.
- 13 I became anxious and almost distraught realizing that I
- 14 was exposing her to car exhaust. Zero emission
- vehicles would eliminate this experience and restore
- 16 clean air and improved health to our communities,
- especially communities of color disproportionately
- 18 exposed to air pollution.
- 19 Additionally, Alternative 2 will complement
- 20 President Biden's American Jobs Plan by creating
- 21 distributed jobs installing charging stations
- 22 nationwide.

- 1 Auto manufacturers are already phasing out ICE
- 2 models in favor of EVs.
- 3 Adopt Alternative 2 to reassure manufacturers that
- 4 they are not taking a risk. Take the opportunity to
- 5 transition our nation off fossil fuels. My husband and
- 6 I have already embraced it. We purchased our first
- 7 hybrid in 2010 and our first EV in 2019. With more
- 8 charging stations, the need for a hybrid and its
- 9 greenhouse gas emissions will be eliminated.
- Following the footsteps of our Canadian neighbors,
- 11 by 2035 Canada will require 100 percent of all new
- 12 light-duty cars and passenger truck sales to be zero
- 13 emissions.
- 14 As an EV driver, I don't miss going to the gas
- 15 station to buy gas. I don't miss going to the car
- dealer to pay for regular service and repairs.
- 17 A 2018 study by the University of Michigan found
- that operating an EV is less than half the cost of
- operating an ICE. There's so many benefits to be
- 20 gained.
- In conclusion, I urge you to adopt the strongest
- 22 possible standard as proposed in Alternative 2. It

- 1 will close loopholes for automakers to avoid the
- 2 standards all together.
- Further, Alternative 2 is necessary to comply with
- 4 Executive Order 12866 requiring agencies to choose the
- 5 regulatory alternative that maximizes net benefits.
- 6 Thank you for holding this public hearing.
- 7 MS. THOMPSON: Thank you for your comment.
- 8 The next speaker will be Cara Fleischer. You may
- 9 now unmute and please state your name and affiliation
- 10 for the record.
- MS. FLEISCHER: Good morning.
- 12 I'm Cara Fleischer from Tallahassee, Florida, and
- 13 the United Methodist Creation Care Leader.
- 14 As a climate advocate, it is an honor to speak to
- 15 you about the need for the strongest vehicle emission
- 16 rules at this pivotal moment in history.
- 17 Life, liberty, and the pursuit of happiness, I
- grew up believing these are my rights as an American.
- 19 In one generation, this constitutional promise has been
- stolen from me, my children, my four-year-old niece,
- 21 every American alive and those yet to be born, all
- 22 because we have failed to act boldly on the climate

- 1 crisis.
- 2 Climate air quality advocacy became my mission
- 3 five years ago after the Paris Agreement was signed and
- 4 hope poured into my heart that world leaders were
- 5 united to solve climate. That was a moment I felt
- 6 called by God and I was changed from the stay-at-home
- 7 mom with a communications background to a full-time
- 8 climate justice advocate.
- 9 It turned out that as a mom with an infant who
- 10 suffered from asthma, I already knew how cars, trucks,
- 11 and power plants were polluting our air and turning it
- 12 into smog.
- Following the EPA Air Quality Index, yellow, red,
- 14 and purple smog alerts were the norm in Atlanta, and we
- 15 felt trapped. We picked up and moved back to my home
- state of Florida for cleaner air that got hit with a
- devastating hurricane shortly after showing us we
- 18 couldn't escape the climate crisis.
- All of this happened when the Obama/Biden vehicle
- 20 emissions regulations were in effect. That is why I
- 21 strongly feel that we need to not only return to those
- 22 standards but to go further to cut vehicle emissions

- 1 that are making us sick, causing thousands of deaths,
- 2 and speeding up the climate crisis.
- 3 The science is clear. The solutions are
- 4 available, and the political will has risen to make
- 5 climate action the top voting issue in the 2020
- 6 election.
- 7 My advocacy led me to the UN Climate Convention
- 8 Top 25 in Madrid as a Christian climate observer. The
- 9 shame Americans endured because our government pulled
- out of the Paris Agreement, abandoning the Paris
- 11 process, and leaving the world adrift without our
- 12 leadership was devastating.
- President Biden returned us to the Paris Agreement
- and when I go to COP 26 in November, I know all eyes
- will be on him and what the United States does.
- Will it be more photo ops and incremental action
- or will we rise to this enormous challenge and put our
- money where our promises are? We need bold leadership,
- 19 the boldest.
- The steps President Biden's EPA takes now will
- 21 either mark him as a champion who literally can save
- the world or just another politician who came up short.

- 1 This is the moment he has been waiting for his whole
- 2 life, a chance to do the ultimate good for humanity,
- 3 and no other decision he makes will come close.
- 4 History will remember if America rose to meet this
- 5 challenge of drastically reducing greenhouse gas
- 6 emissions or failed to do humanity to suffering like
- 7 we've never known.
- 8 Creating strong vehicle emissions rules is a
- 9 substantial step in showing the world that we are
- 10 serious about doing our part to solve the climate
- 11 crisis that our wealthy country played a large part in
- 12 creating. There is no time to waste. The IPCC Report
- was as devastating as it was obvious.
- We have already made irreversible changes to our
- 15 planet and the worst case scenarios are coming
- dangerously fast, in decades, if we don't slam on the
- 17 brakes of vehicle greenhouse gas emissions and cut them
- drastically.
- We can rise above all the darkness and put the
- 20 planet and the future of every human being above
- 21 corporate pressure and profits. We must reduce
- greenhouse gas emissions if my children and all

- 1 Americans are to follow their God-given right to life,
- liberty, and the pursuit of happiness.
- On September 1st, people of faith around the world
- 4 will come together for the World Day of Prayer for
- 5 Creation for 24 hours of constant prayer for those
- 6 suffering from climate catastrophes and for our leaders
- 7 to take bold action to solve the climate crisis leading
- 8 up to COP 26.
- 9 President Biden and all of you will be in my
- 10 prayers.
- 11 Thank you.
- MS. THOMPSON: Thank you for your comment.
- The next speaker will be Dave Cooke. You may now
- unmute and please state your name and affiliation for
- 15 the record.
- MR. COOKE: Thanks. I'm Dave Cooke, Senior
- 17 Vehicles Analyst with the Union of Concerned
- 18 Scientists.
- 19 I'll not belabor the points made by countless
- testifiers these past couple days as to the urgent need
- 21 to address climate change. Unfortunately, EPA's
- 22 proposal does not adequately reflect that urgency.

- 1 It's especially apparent given the unnecessary
- loopholes which run through the agency's proposed rule.
- First, while the agency has significantly narrowed 3
- 4 the damage caused by its proposed extension of the EV
- 5 multiplier, thanks to a more stringent cap, than those
- 6 in the California Agreements, EPA has not adequately
- 7 justified the need for such an incentive, particularly
- in light of its continued refusal to account for the 8
- upstream emissions of these vehicles which already
- 10 significantly rewards EV deployment at the expense of
- 11 quaranteed emissions reductions.
- 12 We recommend the agency simply do away with the
- 13 multipliers entirely.
- 14 Second, the Off-Cycle Credit Program is broken, as
- 15 indicated by EPA's acknowledgement in the proposal that
- 16 manufacturers have been receiving undue credits for a
- 17 number of technologies. Now is the time to rein in
- 18 this program, not expand it.
- 19 We recommend that EPA finalize the more rigorous
- 20 definitions of the off-cycle technologies while
- 21 maintaining the 10 gram per mile menu cap.
- 22 Third, manufacturers are currently sitting on over

- 1 220 million mega grams of credits. Even under the
- 2 current rules, our modeling indicates that the industry
- 3 has more than enough credits to comply with the
- 4 agency's proposal in 2023 without any lifetime
- 5 extensions.
- While the proposed extension may be more limited
- 7 than a similar give-away in the 2012 rules, the agency
- 8 didn't conduct any modeling effort to justify the need
- 9 for such an extension, and we recommend that the agency
- 10 eliminate it.
- Fourth, the full-sized pickup advanced technology
- 12 credit is unwarranted for it has clearly proven any
- 13 concerns about electrifying this segment wrong with the
- 14 power boost hybrid package is already at nearly a 10
- percent take rate without any additional credits.
- It's hard to see what's accomplished with this,
- apart from directly cutting into the stringency of the
- 18 rule with a corporate windfall.
- 19 Finally, all of these loopholes are made available
- ahead of any changes in the rule. In other words, EPA
- is proposing to weaken the standards in Model Years
- 22 2022 and earlier below that of the SAFE Rule.

- 1 If EPA does not believe it has the authority to
- 2 strengthen the rules for Model Years 2021 and 2022, it
- 3 should not undercut them either. No added flexibility
- 4 should go into effect for the industry until the year
- 5 EPA begins increasing the stringency of the rule.
- 6 Otherwise, it single weakens the already inadequate
- ⁷ standards on the books today.
- 8 EPA deserves kudos for moving quickly to right the
- 9 ship that the previous Administration tried to sink,
- 10 but it remains more than a few bucketfuls short of
- 11 bailing us out of the current disaster.
- 12 Putting in place Alternative Number 2 for Model
- 13 Years 2023 through 2025, increasing its stringency in
- 14 2026, and eliminating the remaining unnecessary
- 15 flexibilities would likely still fall short of the
- 16 emissions reductions promised nearly a decade ago, but
- it would at least put the industry back on course with
- 18 the trajectory commensurate with President Biden's
- 19 recent Executive Order and with what the science says
- is needed to address climate change.
- 21 Thank you for the opportunity to testify today.
- We'll continue to engage with the EPA to provide

- 1 further data to strengthen the rule and ensure we can
- achieve the maximum reductions possible from this
- 3 sector.
- 4 MS. THOMPSON: Thank you for your comment.
- 5 The next speaker will be Dodie Hawkins. You may
- 6 now unmute and please state your name and affiliation
- 7 for the record.
- 8 MS. HAWKINS: Good morning. I'm Dodie Hawkins,
- here representing New Mexico Conference United
- 10 Methodist Women, New Mexico Interfaith Power & Light.
- 11 Excuse me.
- 12 I want to thank you for allowing so many of us to
- 13 share our thoughts and expertise regarding the EPA Gas
- 14 Emission Standards.
- 15 I have listened for two days to convincing
- 16 arguments to support the most robust and inclusive
- 17 standards possible if we are to avert the tipping point
- 18 to a climate disaster. So many people from all walks
- 19 of life have taken their time to testify and I thank
- 20 them.
- 21 What more can I say to convince the EPA to develop
- 22 the standards requested by so many esteemed speakers?

- 1 Anything I might say related to climate change,
- 2 combustion engines, electric vehicles, or the like
- 3 would only be redundant.
- 4 So I would like to focus my few minutes on
- 5 something else, our responsibility to be good stewards
- of God's creation: this world. I know there are
- 7 people rolling their eyes and tuning me out as just
- 8 some batty old lady but hear me out, please.
- 9 We can't all be at all places at all times. So
- 10 responsible people are selected to be stewards or the
- 11 persons who manage another person's property or affairs
- 12 and that is what the EPA is, our steward of earth.
- I believe the earth is speaking to us loud and
- 14 clear. Earthquakes, floods, droughts, fires, and many
- other tragic consequences of our disregard for the
- earth are becoming all too frequent. Unfortunately, we
- have not heard the cries from the earth for far too
- long.
- 19 Is it too late? I pray not. I am blessed with 15
- 20 grandchildren and five great-grandchildren so far.
- Will they feel that I betrayed them by not doing enough
- to stop the onslaught of climate change? Again, I pray

- 1 not. But EPA stewards, you have the opportunity to be
- 2 good stewards, good managers of this earth.
- Personally, at 84, I'm running out of time and
- 4 energy to fight the fight but not so for you.
- 5 United Methodist Women has made Just Energy for
- 6 All a pillar of their efforts for the next four years.
- 7 This organization of over 800,000 women will be
- 8 watching the EPA to see if they are up to the task of
- 9 being good stewards. Let's all pray that you are.
- 10 Thank you.
- MS. THOMPSON: Thank you for your comment.
- 12 The next speaker will be Michel Hartrick. You may
- 13 now unmute and please state your name and affiliation
- 14 for the record.
- MR. HARTRICK: Good morning. I am Michel
- 16 Hartrick, representing the Alliance for Automotive
- 17 Innovation or AutoInnovators.
- 18 AutoInnovators represents automakers that produce
- nearly 99 percent of all new light-duty vehicles sold
- in the United States, their suppliers and technology
- 21 and mobility companies.
- 22 AutoInnovators and our member companies are

- 1 aligned with this Administration's goals and vision for
- ² addressing climate change and fostering a strong and
- 3 competitive U.S. economy. We support the goals of
- 4 EPA's GHG Program.
- 5 Today, the auto industry is transforming to
- 6 provide cleaner, safer, and smarter automobiles. Auto
- 7 companies are stepping up to the challenge to greatly
- 8 expand electrification, setting aspirations for 40
- 9 percent to 50 percent of new light-duty vehicle sales
- in 2030 and investing over \$330 billion on
- electrification by 2025.
- Thus, it is critical that EPA, NHTSA,
- 13 AutoInnovators, auto companies, and other stakeholders
- work together to reduce greenhouse gas emissions and to
- enable a shift to electrified and zero emission
- vehicles, including battery electric vehicles, plug-in
- 17 hybrid electric vehicles, and fuel cell electric
- vehicles, while continuing to support U.S. auto jobs.
- 19 There are three aspects that I want to highlight
- today.
- First, the long-term vision starts today. Going
- from two percent electric vehicle sales today to 40

- 1 percent or more in less than nine years will be
- 2 challenging. Achieving this goal will require more
- 3 than just regulating vehicles. It requires significant
- 4 efforts by all stakeholders, including federal, state,
- 5 and local governments, utilities, refueling
- 6 infrastructure providers, builders, and fleet
- 7 operators, to name a few.
- 8 Ensuring EVs and their charging and refueling
- 9 infrastructure are affordable, equitable, and
- 10 convenient for customers will be crucial to growing
- 11 customer demand and making the EV transition.
- 12 This will require a comprehensive national
- 13 strategy which includes state, local, and federal
- 14 investments to put into place the necessary conditions
- 15 for success which are in addition to the substantial
- 16 investments that automakers are making towards the EV
- 17 transition.
- Second, today's standards need to include actions
- 19 to set the stage for longer-term success. These
- 20 standards will require significant increase in
- 21 electrification.
- Therefore, we support EPA's inclusion of

- 1 provisions that incentivize and encourage this,
- 2 including electric vehicle production multipliers and
- 3 the recognition that the electric vehicles have zero
- 4 tailpipe emissions. These tools are necessary and
- 5 important to a robust and well-balanced program.
- Finally, I want to note the importance of
- 7 coordination and stringency alignment between EPA's
- 8 greenhouse gas and NHTSA's Corporate Average Fuel
- 9 Economy Programs.
- 10 Fundamental to the principles the agencies and the
- 11 auto industry have worked under since 2009, alignment
- of these regulations is critical to reducing
- 13 unnecessary burdens.
- We must put all resources toward achieving our
- 15 shared goals. This is especially important as
- 16 automakers' investments transition away from internal
- 17 combustion engines and increase in electric vehicle
- 18 technologies.
- 19 Thank you for your time. AutoInnovators
- 20 anticipates submitting written comments to address
- 21 EPA's greenhouse gas standards, NHTSA's corporate
- 22 average fuel economy standards, and the coordination

- 1 and harmonization between the two. I'm happy to take
- ² any questions.
- MS. THOMPSON: Thank you for your comment.
- 4 AS a reminder, if you are speaking today, you will
- 5 receive a notification on your screen that you are
- 6 being promoted to the role of panelist shortly prior to
- your speaking time. You must accept that invitation to
- 8 be able to unmute when you are called to testify. This
- 9 will also allow you to turn on your camera which we
- 10 encourage you to do.
- Speakers connected by telephone should unmute
- their phones when called to testify.
- 13 If you have joined using a name other than what is
- 14 listed on the speaker list or have dialed in, we ask
- that you please raise your hand when called on so we
- 16 can promote you to the role of panelist. If you have
- called in, you can raise your hand by dialing Star 9.
- 18 If you are having technical difficulties, please
- send an e-mail to public_hearing@abtassoc.com or call
- 919-294-7712. If you are not registered to speak but
- you would like to, please send an e-mail with your name
- 22 and phone number to public_Hearing@abtassoc.com or call

- 1 919-294-7712.
- The next speaker is Mary Ann Baier. Mary Ann, we
- 3 do not currently have your full name listed on the list
- 4 of attendees. We do have a Mary Ann in attendance. I
- 5 would ask that you raise your hand which I can see that
- 6 you did. So I will promote you to panelist at this
- 7 time.
- When you are ready, you may unmute and please
- 9 state your name and affiliation for the record.
- MS. BAIER: Hello. Can you hear me?
- MS. THOMPSON: Yes.
- MS. BAIER: Okay. Thank you.
- 13 Thank you for the opportunity to testify. My name
- 14 is Mary Ann Baier, and I'm here today as a retired
- 15 private citizen from Dearborn, Michigan. I own a Kia
- 16 Niro Electric Car that I supply with my solar panels.
- I support this Administration's swift action on
- 18 clean cars but urge the EPA to adopt their second
- 19 alternative that would deliver greater savings to
- 20 consumers and eliminate unnecessary loopholes for
- 21 automakers.
- I believe that disincentives should be applied to

- 1 any internal combustion engine vehicle by applying a
- 2 carbon tax and incentives should be given to those
- 3 businesses who purchase an electric vehicle by not only
- 4 giving a tax credit but by allowing them to take a
- 5 faster depreciation on the vehicle.
- 6 The world is in Code Red and we need Code Red
- 7 solutions and combustion engine production should be
- 8 ended as soon as possible.
- 9 Thank you for the opportunity to speak today.
- MS. THOMPSON: Thank you for your comment.
- The next speaker will be Douglas Durante. You may
- 12 now unmute and please state your name and affiliation
- 13 for the record.
- MR. DURANTE: Hi, good morning. I think I'm
- unmuting. Can you hear me?
- MS. THOMPSON: We can.
- MR. DURANTE: And do I need to do something to see
- 18 me?
- MS. THOMPSON: You are welcome to come on camera
- 20 by clicking the Start Video button which should be
- located on the lower left-hand side of your screen.
- MR. DURANTE: I'm not seeing that unfortunately.

- 1 Just a minute. Oh, I'm sorry, here it is. Okay. My
- 2 mistake. See me now?
- MS. THOMPSON: Yes, we can see you.
- 4 MR. DURANTE: Okay. I'm sorry.
- Good morning. My name is Doug Durante. I'm the
- 6 Executive Director of the Clean Fuels Development
- 7 Coalition. We're a nonprofit organization supporting
- 8 policies and programs to reduce the use of petroleum
- 9 and improve air quality.
- We want to commend the EPA for your action on this
- 11 rule and recognizing how important it is.
- But this rule makes the Administration's
- preference clear with regard to electric vehicles.
- 14 Done right, EVs can play a key role in our collective
- 15 efforts to increase efficiencies and reduce pollution
- 16 without question.
- Our issue with this rule is what it does not do,
- which is to acknowledge that even under the most
- optimistic scenarios EVs will not provide significant
- 20 benefits for many years and during that time we'll
- 21 continue to rely on internal combustion engines
- 22 operating on gasoline.

- 1 If the objective is to decarbonize our
- 2 transportation fuels, gasoline is the predominant fuel
- in the transportation sector with approximately a 125
- 4 billion gallons consumed annually, it should be obvious
- 5 where we start. We sell 12 to 15 million new cars
- 6 every year that have an average road life of about 12
- years.
- 8 So even if EVs chip away and capture market share,
- gasoline will remain the primary fuel. We will drive
- 10 trillions of miles over the next decade alone on
- 11 gasoline.
- 12 The way we can make that gasoline more efficient
- and less of a carbon and GHG emitter is to give
- 14 automakers the tools they need, the key one being a
- 15 higher minimum octane standard.
- The proposal of how you could recognize octane
- when the SAFE Rule was developed in 2020 but not now,
- and I use the word "recognize" loosely because you
- didn't take any action on octane but at least you
- 20 solicited comments on how high octane could contribute
- to the objectives of increased efficiency and reduced
- 22 emissions, what the optimum levels were, what kinds of

- 1 benefits could be expected, what other issues would
- 2 arise, and, importantly, how it can be done consistent
- with Title 2 of the Clean Air Act, which, among other
- 4 things, establishes controls on air toxics.
- We feel like it's a fair question for us to ask
- 6 what happened. You say in the rule you've updated the
- 7 analysis from the 2020 final rule. We provided
- 8 detailed information on the octane issue then and asked
- 9 EPA for the opportunity to comment again so we could
- 10 provide even more compelling data and information. You
- 11 did not even ask.
- 12 Increasing octane allows automakers to give better
- 13 mileage, plain and simple. This is not a futuristic
- 14 vision as future cars can absolutely maximize high-
- octane fuels. These gains can also be achieved now
- with today's cars and this is verified by the auto
- industry in correspondence that we've submitted to you.
- The other half of the story is increasing octane
- while ensuring it does not come from aromatic compounds
- 20 not only tackles the highest carbon component in
- 21 gasoline but also the most deadly and I quote from your
- own proposed rule the statement that EPA has changed

- 1 its position and "it is more appropriate to place
- greater weight on the magnitude and benefits of
- 3 reducing emissions and endanger public health and
- 4 welfare."
- 5 Aromatics like benzene and the family of benzene
- 6 products are the primary source of octane and produce
- 7 fine particulates which are contributing to a range of
- 8 negative health impacts.
- We have an abundant supply of non-toxic, low-
- 10 carbon, high-octane ethanol that can meet the octane
- 11 demand and replace those aromatics.
- We ask that in the final regulatory analysis for
- this rule and in the preamble and anything else EPA
- 14 puts out you acknowledge the need to focus on gasoline
- and if we supply information on octane in our comments,
- 16 it not be disregarded as outside the scope of this rule
- just because it's not in it now.
- 18 Thank you for your consideration of these views
- 19 and we will be submitting more detailed comments.
- 20 Thank you.
- MS. THOMPSON: Thank you for your comment.
- The next speaker will be Mark Cooper. AS a

- 1 reminder, Mark, you will need to unmute your phone in
- order to speak. When you are ready, please state your
- 3 name and affiliation for the record.
- DR. COOPER: Thank you. Can you hear me?
- 5 MS. THOMPSON: We can.
- DR. COOPER: Can you see me?
- 7 MS. THOMPSON: We will not be able to see you
- 8 because you have dialed in today.
- DR. COOPER: Okay. Fair enough. I have a picture
- on. I thought I could do it, but I'll begin.
- I am Dr. Mark Cooper, Director of Research at the
- 12 Consumer Federation of America.
- We greatly appreciate the opportunity to speak
- 14 today. I want to begin by applauding the agency for
- taking the time to do it right. It was easy to say
- that the rule adopted by the previous Administration
- made no sense but much more challenging to reverse the
- 18 rule in a manner that would withstand scrutiny by the
- 19 courts under the Administrative Procedure Act.
- Over the course of a decade, we have shown the
- 21 steady improvement in rule-writing that makes the
- 22 current rules and national program that was defended by

- 1 the TAR consistent with the underlying energy statutes
- 2 and the APA.
- It was important to restore the correct logic and
- 4 approach of the national program. It was necessary to
- 5 obey the statutory timelines laid out in the Energy
- 6 Independence and Security Act, EISA. It was important
- 7 to signal that there would be a dramatic change in
- 8 direction but one that stayed within those constraints.
- Now the hard work begins. The agency has
- 10 continued with the approach to regulation that we call
- 11 command but not control.
- 12 This approach involves six elements which we
- identified as long-term, technology-neutral, product-
- 14 neutral, responsive to industry needs, responsive to
- 15 consumer needs, and pro-competitive.
- The one challenge here is that the agency must
- accelerate a transition in technology to an all-
- electric fleet, a transformation to which many of the
- 19 automakers have already committed.
- Therefore, the agency is not mandating a
- technology, it is seeking to smooth and accelerate its
- 22 adoption.

- 1 Two key features of the transition are then
- crucial. First, there are likely to be at least 100
- 3 million gasoline vehicles sold before the transition.
- 4 It is complete. They are likely to stay on the road
- 5 for a quarter of a century. Therefore, it is important
- 6 to make sure that they are as efficient as possible.
- 7 Doing so can help the transition because setting high
- 8 standards on the gasoline part of the fleet will speed
- 9 the adoption of electric vehicles and a significant
- 10 part of the gains in efficiency of those vehicles,
- vehicle design, operation, may be applicable to the
- 12 electricity portion of the fleet.
- Second, it is important to close the loopholes and
- 14 you've heard a lot about those. We're especially
- concerned about loopholes that might allow automakers
- 16 to use the electrical vehicle part of the fleet to
- 17 relax the efficiency of the gasoline part. That would
- be a mistake and we urge you not to allow that to
- 19 happen.
- 20 Establishing the goal of an all-electric fleet and
- 21 speeding the transition will require changes in
- 22 infrastructure beyond the setting of the efficiency

- 1 standards and the Administration has recognized and
- 2 committed to doing so in the near-term.
- Our economic analysis shows and the agency seems
- 4 to agree that the total cost of driving will go down as
- 5 we transition to an all-electric fleet. That is, the
- 6 costs measured by the pocketbook spending is negative.
- 7 That is, we save more than we spend on the technology.
- Public health and environmental benefits increase
- 9 and already positive benefit cost ratio. Given that
- 10 finding and the already demonstrated commitment to
- infrastructure, we believe that this program will
- 12 benefit all Americans of all income levels and the
- 13 faster the transition takes place, the better off we
- 14 will all be.
- 15 Thank you.
- MS. THOMPSON: Thank you for your comment.
- 17 Speaker Block 2
- MS. THOMPSON: The next speaker will be Luke
- 19 Tonachel. You may now unmute and please state your
- 20 name and affiliation for the record.
- MR. TONACHEL: Good morning, and thank you for
- 22 holding this hearing.

- 1 My name is Luke Tonachel, and I'm Director of the
- Clean Vehicle and Fuels Group at the Natural Resources
- 3 Defense Council or NRDC.
- 4 I'm here today on behalf of NRDC's more than three
- million members and online activists who support our 5
- 6 efforts to safeguard rights of all Americans to clean
- 7 air, clean water, and a healthy planet.
- 8 NRDC appreciates EPA's efforts to get the U.S.
- back on the road to cutting carbon pollution from
- 10 light-duty vehicles. EPA's mission to protect public
- 11 health and welfare compelled the agency to strengthen
- 12 vehicle pollution standards.
- 13 The standards that EPA finalized in 2012 during
- 14 the Obama Administration were justified and provided
- 15 much-needed carbon reductions. Despite the dramatic
- 16 weakening of the standards caused by the SAFE Part 2
- 17 Rulemaking, EPA should be working to at least restore
- 18 the carbon pollution reductions expected under the 2012
- 19 rule for Model Years '21 through '25.
- 20 Therefore, NRDC urges EPA to finalize a rule
- 21 stronger than the proposal and at least as stringent as
- 22 Alternative 2. Alternative 2 would get the U.S. close

- to recapturing the much-needed emissions reductions 1
- that were expected under the original 2012 Obama
- 3 standards.
- According to EPA's analysis, Alternative 2 would 4
- 5 deliver up to \$16 billion more in net benefits than the
- 6 proposal over the lifetime of the Model Year 2023 to
- 7 2026 vehicles.
- 8 Simply put, under Alternative 2 the U.S. would
- achieve more emissions reductions and consumers would
- 10 save more money at the pump than the proposal.
- NRDC believes that Alternative 2 should be adopted 11
- 12 without the advanced technology incentive multipliers
- 13 for Model Years 2022 to 2025 to further align them with
- 14 the 2012 rule.
- 15 Advanced technologies, particularly plug-in
- 16 electric vehicles, are already being deployed at levels
- 17 contemplated by the 2012 rule in 2025 without
- 18 multipliers.
- 19 To encourage the continued deployment of the
- 20 cleanest vehicle technologies, including
- 21 electrification, NRDC urges EPA to also strengthen the
- 22 Model Year 2026 stringency.

- 1 President Biden has set a goal of 50 percent EV
- 2 sales by 2030. A recent analysis of automotive
- 3 technology diffusion curves in leading European EV
- 4 markets indicates that meeting a 50 percent sales
- 5 target in 2030 would require 2026 sales to be at least
- 6 12 percent which is significantly above the eight
- 7 percent projection for the proposal.
- 8 Tightening the Model Year 2026 stringency by at
- 9 least an additional 10 grams per mile would help ensure
- 10 that automakers stay on track for meeting President
- 11 Biden's 2030 goal.
- 12 In conclusion, NRDC urges EPA to finalize a Model
- 13 Year 2023 to 2026 rule that is stronger than the
- 14 current proposal to maximize near-term carbon
- 15 reductions and set the U.S. on the best path for post-
- 16 2026 standards that meet the moment on climate.
- 17 Thank you very much for your time.
- MS. THOMPSON: Thank you for your comment.
- The next speaker on our list is Kent Smith. At
- this time, we do not see him listed among the list of
- 21 attendees. However, if you have joined using a name
- other than what is listed on the speaker list or have

- 1 dialed in, we ask that you please raise your hand at
- 2 this time and if you have dialed in, you can do so by
- 3 dialing Star 9 on your phone.
- 4 (No response.)
- 5 MS. THOMPSON: We will now move on to the next
- 6 speaker.
- 7 The next speaker will be Richard Newhouse. You
- 8 may now unmute and please state your name and
- 9 affiliation for the record.
- MR. NEWHOUSE: Can you see me?
- MS. THOMPSON: We can.
- MR. NEWHOUSE: Good. That's encouraging.
- Good morning. My name is Richard Newhouse. I'm a
- 14 retired civil engineer, and I live now in Austin,
- 15 Texas. I'm formerly from the New York City
- 16 Metropolitan area.
- The reason that I got initially involved living
- 18 all my life in the New York City Metropolitan area was
- 19 the fact that the City Metropolitan area is a non-
- 20 attainment area and the number of alerts that I started
- to get for air quality was beginning to concern me, and
- 22 I'm very concerned now about my six grandchildren and

- 1 the kind of conditions that we're leaving our
- ² grandchildren.
- I think that they deserve better, and I almost
- 4 have the feeling that the earth is trying to send us a
- 5 message and trying to shake us off between earthquakes,
- 6 drought and floods, and here in Austin, Texas, we have
- 7 a unique situation where we're getting dust storms from
- 8 the Saharan Desert, if you can believe that.
- In any case, I want the EPA to shift to their
- 10 Alternative 2 which would save consumers more money,
- 11 close loopholes which you've heard a lot about in the
- 12 testimony, for automobiles that would undermine these
- 13 standards.
- We must ensure that the voices in support of
- 15 strong vehicle emissions standards are heard,
- 16 especially since the industry lobbyists will use this
- hearing as an opportunity to submit misinformation in
- 18 support of weaker standards.
- 19 Improving fuel economy is one of the ways U.S.
- 20 automakers can reduce greenhouse gas emissions of their
- vehicles and nine of 10 U.S. adults agree that
- 22 automakers would continue to improve fuel economy for

- 1 all vehicles and large SUVs and pickup trucks.
- Strong clean air standards can drive down vehicle
- 3 pollution, support our economy with consumer savings
- 4 and spur innovation in the development of new cleaner
- 5 car technologies and electrification of the
- 6 transportation sector which you've heard quite a bit
- 7 about.
- 8 The Administration has pledged that this clean air
- 9 announcement will put the U.S. on track to reduce
- 10 greenhouse gas emissions from new passenger vehicles by
- more than 60 percent by 2030 compared to vehicles sold
- 12 last year.
- The weaker proposal with additional loopholes for
- 14 automobiles means that proposed standards would deliver
- only 75 percent of the savings of the original
- 16 Obama/Biden standards. This is an unnecessary
- 17 compromise, given the EPA's own analysis which
- indicates that loopholes around EVs would deliver only
- 19 the stated purpose of increasing EV sales.
- 20 EPA's own Alternative 2 in the proposed rule
- 21 eliminates many loopholes for automakers and includes
- 22 slightly stronger standards that match the Obama/Biden-

- 1 era standards from 2023 onwards that would deliver
- ² greatest savings.
- 3 Setting strong federal clean air standards through
- 4 2026 can put us back on track to save consumers up to
- 5 \$80 billion in reduced gas, maintenance, and price
- 6 costs over the lifetime of new vehicles purchased
- 7 during the next five years while restoring clean air in
- 8 our communities.
- 9 I feel very strongly about Alternative 2 as I
- think we owe it to our grandchildren to leave them a
- 11 better world than the one we have now.
- 12 So thank you for allowing me the opportunity to
- speak, considering that I was originally going to speak
- 14 yesterday but I had a dental emergency. So I really do
- 15 appreciate your flexibility. Thank you very much.
- MS. THOMPSON: Thank you for your comment.
- 17 As a reminder, if you are speaking today, you will
- 18 receive a notification on your screen that you are
- 19 being promoted to the role of panelist shortly prior to
- your speaking time. You must accept that invitation to
- 21 be able to unmute when you are called to testify. This
- 22 will also allow you to turn on your camera which we

- 1 encourage you to do.
- 2 Speakers connected by telephone should unmute
- 3 their phones when called to testify.
- 4 If you have joined using a name other than what is
- 5 listed on the speaker list or have dialed in, we ask
- 6 that you please raise your hand when called on so we
- 7 can promote you to the role of panelist. If you have
- 8 called in, you can raise your hand by dialing Star 9.
- 9 If you are having technical difficulties, please
- send an e-mail to public_hearing@abtassoc.com or call
- 11 919-294-7712. If you are not registered to speak but
- 12 you would like to, please send an e-mail with your name
- and phone number to public_hearing@abtassoc.com or call
- 14 919-294-7712.
- 15 At this time we will move to the next block of
- 16 speakers.
- The first speaker on our list is Victoria Gillet.
- 18 Victoria, we do not currently have you listed among the
- 19 attendees. However, if you've joined using a different
- 20 name, we ask that you raise your hand at this time or
- 21 dial Star 9 on your phone.
- 22 (No response.)

- MS. THOMPSON: We will move on to the next
- 2 speaker.
- The next speaker will be Thomas Holiday. You may
- 4 now unmute and please state your name and affiliation
- 5 for the record.
- 6 MR. HOLIDAY: Good morning. My name is Thomas
- 7 Holiday, and I appreciate the EPA arranging this public
- 8 hearing allowing participation in the critically
- 9 important automotive sector for the future of American
- 10 mobility.
- 11 Am I coming through on the speaker, on the camera?
- MS. THOMPSON: Yes.
- MR. HOLIDAY: Okay. Great.
- 14 All right. Well, I support the proposed EPA
- 15 Greenhouse Gas Emissions Standards for Model Year 2026
- and just to be conscious about that, that would be a
- 52-mile-per-gallon efficiency and a CO2 burn of a 171
- 18 grams per mile.
- The reason I endorse that is it's already done by
- the top three hybrids, the top three, the most
- efficient, the most highest-achieving hybrids in
- 22 production, the Toyota Prius, the Honda Insight, the

- 1 Shindai Hyundai Ioniq, and so those three really
- ² already do that.
- 3 All I would ask is that the automakers have a
- 4 significant increase in the production of hybrids. In
- other words, the technical standards of the fleet
- 6 should mix their hybrids. Instead of a two percent
- 7 mile hybrid and a five percent strong hybrid, the
- 8 automakers should voluntarily raise those hybrids 10
- 9 percent per mile hybrids, 10 percent of the fleet for
- 10 strong hybrids. If they do that, they will sell them.
- Here's how I know that. NASA science reveals that
- 12 for millennia the atmosphere carbon dioxide had never
- been over 300 parts per million until 1950. Today,
- 14 it's over 400 ppm. Improving emissions doesn't mean
- 15 going backwards in efficiency or acceleration.
- We've had in the latest 24-hour Lemans Endurance
- 17 Race two Toyota Hybrids beat the pants off of
- 18 everybody. They came in Number 1 and Number 2. There
- were two Toyota Hybrids in that race. That was 3,500
- 20 miles and an average speed of a 153 miles an hour and
- they took it and those hybrids, I'm telling you I've
- driven one for eight years, the 53 miles to the gallon

- 1 is realistic.
- 2 So what do hybrids do? Why am I saying that?
- 3 Because hybrids give us independence from the
- 4 vulnerability in a developing grid, gives us
- 5 independence from natural disasters, cyber hacks,
- 6 disruptions due to evolving demand on the grid, and
- 7 they get us there right away.
- 8 So mixing the hybrids in at a lower percentage
- 9 will advance the high efficiency of every fleet. We
- 10 need more hybrids and one more thing. Pollution is
- 11 local, and it's also global. Weather is global, and
- the global air climate is a world circulation system
- 13 with winds that transport water, heat, CO2, water
- vapor, all of the greenhouse gas emissions.
- We're like living in a circular bowl with the
- 16 weather systems running fairly directly west to east
- and then occasionally get the polar weather and it
- 18 verticals down, but in America it's one of the cleanest
- 19 producers of electricity in the world.
- However, and that's because we use more natural
- gas here, but we still use more oil. We burn more oil
- 22 to make electricity. About 45 percent of our electric

- 1 production is done with oil, about 41 percent with gas,
- 2 and unfortunately still about 10 percent with coal.
- 3 Down the line is nuclear, wind, and hydropower way down
- 4 there.
- 5 So it's not a free ride to go straight to
- 6 electricity and say all of these vehicles that we
- 7 really have to have, we couldn't handle it. I'm not
- 8 sure we can handle it by 2026, but if we go to hybrids
- 9 first and we build up the hybrid arsenal on the roads,
- 10 I think that it would go a long way.
- I just say electrifying American mobility, it
- 12 starts here. Let's do it right, put the immediate
- emphasis on hybrid.
- 14 Thank you. God bless. Amen.
- MS. THOMPSON: Thank you for your comment.
- The next speaker is Leah Wiste. Leo, we do not
- currently see you listed. However, I do see a raised
- 18 hand for a different name that I will promote to
- 19 panelist, and when you are ready, you may unmute and
- 20 please state your and affiliation for the record.
- MS. WISTE: My name is Leah Wiste, and I'm the
- 22 Executive Director of Michigan Interfaith Power & Light

- or Michigan IPL, as you can see on my screen, and we
- work with over 300 member congregations throughout the
- 3 state and these congregations comprise thousands of
- 4 people of faith and conscience who are committed to
- 5 bolt climate action and protecting our communities.
- Thank you for allowing me to offer testimony
- 7 today.
- 8 When President Biden announced the draft tailpipe
- 9 emissions standards earlier this month, Michigan
- 10 Congressman Dan Kildee offered a strange kind of
- 11 praise, saying, "This is sort of a Goldie Locks goal.
- 12 Not too much, not too little. It's just right." But
- 13 it's clear that the time has passed for moderate not
- 14 too much, not too little policy.
- When I first began working at Michigan IPL eight
- 16 years ago, we pointed to the climate impacts that were
- 17 happening in other parts of the world and to
- 18 scientists' prediction of warming temperatures and
- increasingly erratic weather, but we no longer talk
- 20 about climate impacts in the future tense.
- This summer, the climate crisis brought another
- thousand-year flood to Detroit where I live, our second

- 1 since 2014. In June, an overnight rainfall of seven
- inches, twice the amount of rain Detroit receives for
- 3 the whole month. It shut down I-94 for days and
- 4 flooded thousands of basements. \$96 million in relief
- 5 has been approved by FEMA as of July 15th. Beyond the
- 6 immediate loss in damages, those whose homes were
- 7 impacted are likely to experience health consequences
- from lingering mold and sewage which are especially 8
- dangerous for those already made vulnerable by asthma,
- 10 COVID, and other diseases.
- 11 Since transportation emissions are the largest
- 12 source in U.S. climate pollution, clean car standards
- 13 must be commensurate with the climate emergency we are
- 14 experiencing right now.
- 15 The current proposal falls dangerously short.
- 16 proposed standards are full of loopholes and rely on
- 17 voluntary commitments from the automakers, the same
- 18 automakers who got an \$80 billion government bailout in
- 19 2009, agreed to stronger emissions reductions under
- 20 President Obama and then reneged on that commitment
- 21 when the political winds changed. Too much is at stake
- 22 for us to rely on the voluntary commitments of this

- 1 monster untrustworthy industry now.
- We at Michigan Interfaith Power & Light envision a
- 3 world where communities thrive, have abundant health,
- 4 and live in right relationship with each other and the
- 5 earth that sustains us.
- 6 We're asking for a 2030 standard for cars and
- 7 light-duty trucks that reduces greenhouse gases to 60
- 8 percent below today's average and to make all new
- 9 trucks and buses zero emissions by 2040.
- We're calling for all cars and light-duty trucks
- to be zero emissions by 2035 which will require at
- 12 least 60 percent to be zero emissions by 2030.
- The draft clean cars proposal can be a moral
- 14 opportunity. We have in front of us a chance to
- 15 respond to the cry of our communities and the cry of
- the earth, an opportunity to follow the science and to
- move rapidly to make the emissions reductions we know
- 18 are necessary.
- 19 It is possible and it can be done in a way that
- benefits us in Michigan, our country, and the world.
- 21 Thank you so much.
- MS. THOMPSON: Thank you for your comment.

- 1 The next speaker will be Mario Greco. You may now
- unmute and state your name and affiliation for the
- 3 record.
- 4 MR. GRECO: Hi, good morning.
- My name is Mario Greco, and I'm the Director of 5
- 6 Global Automotive Strategy and Marketing at Novellas.
- 7 Today, I'm speaking on behalf of the Aluminum
- 8 Association Transportation Group, a trade group
- representing the U.S. aluminum industry.
- 10 I want to begin by thanking the EPA, NHTSA, and
- 11 the Biden Administration. We commend the effort for
- 12 prioritizing decarbonization in the transportation
- sector and likewise believe more efficient mobility 13
- 14 solutions will strengthen the United States competitive
- 15 advantage in the global marketplace.
- 16 Our priorities are aligned. The aluminum
- 17 industry, responsible for more than 650,000 jobs and
- 18 over a \$174 billion in economic impact, is committed to
- 19 lowering emissions, improving safety, and driving
- 20 vehicle innovation.
- 21 High-strength/low-weight aluminum plays an
- 22 integral role in the development of environmentally-

- 1 sustainable vehicles. The most advanced vehicles on
- the road today feature high-aluminum content from the
- 3 Tesla Model 3 to the Ford F-150.
- 4 Looking ahead as the industry embarks on the next
- 5 phase of electrification, mass reduction with aluminum
- 6 remains a critical component for achieving cost-
- 7 effective reductions with no adverse effects to safety
- nor affordability. 8
- 9 Research confirms automotive engineers rely most
- 10 on aluminum to achieve aggressive emission targets.
- 11 This is why aluminum remains the single fastest-growing
- 12 automotive material today.
- 13 This growth derives continued investment and
- 14 technical innovation. Since 2013, aluminum companies
- 15 committed or invested more than \$3 billion in domestic
- 16 manufacturing and through collaboration aluminum
- 17 producers helping to build a circular economy.
- 18 My company, Novellas, worked with Ford to develop
- 19 the world's largest closed-loop recycling system which
- 20 helps recycle enough aluminum scrap to produce 37,000
- 21 new F-150 bodies each month.
- 22 In 2020, Americans bought more pickup trucks than

- 1 cars for the first time in history. With the help of
- 2 aluminum, the popular F-150 pickup improved safety,
- 3 performance, efficiency, and capability over its steel
- 4 predecessor. This year, Ford also launched the
- 5 aluminum-intensive electric F-150 Lightening,
- 6 confirming aluminum's value in helping automakers
- 7 produce stylish electric vehicles that don't break the
- 8 bank.
- 9 Notably, a critically-reviewed study confirms in
- 10 all aluminum pickup truck design offer the smallest
- 11 total carbon life cycle footprint when compared with
- 12 baseline steel truck.
- 13 As demand for trucks and SUVs increases, aluminum
- 14 adds inherent value. Automotive aluminum is just
- 15 getting started and we look forward to continued
- 16 collaboration to bring Americans safe, affordable, and
- 17 efficient vehicles they love to drive.
- The aluminum industry appreciates the
- 19 Administration's data-driven approach to updating fuel
- 20 economy emission targets and we look forward to
- 21 submitting our detailed assessment of the proposed
- 22 rulemaking by close of the written comment period.

- 1 Thank you.
- MS. THOMPSON: Thank you for your comment.
- 3 The next speaker will be Reem Rafe. You may now
- 4 unmute and please state your name and affiliation for
- 5 the record.
- 6 MS. RAFE: Good morning. My name is Reem Rafe,
- 7 and I'm a Policy Advisor at the BlueGreen Alliance. The
- 8 BlueGreen Alliance unites America's largest labor
- 9 unions and environmental organizations to solve today's
- 10 climate challenges in ways that create and maintain
- quality jobs and build a clean, thriving, and equitable
- 12 economy.
- 13 Thank you for the opportunity to testify today.
- We know that climate change and economic injustice
- are the most fundamental challenges we face today and
- we know that they're inextricably intertwined. In the
- transportation sector, which accounts for nearly 30
- 18 percent of U.S. greenhouse gas emissions, this
- intersection is visible in the disproportionate impact
- of vehicle emissions on low-income and non-white
- 21 communities.
- It's visible in the disparities in access to

- 1 cleaner vehicles and other mobility options across
- 2 income levels and it's visible in the impact (audio
- 3 glitch) that auto manufacturing communities which have
- 4 seen good jobs offshored and anchor facilities
- 5 shuttered due to ill-conceived industrial policies that
- 6 gutted the middle-class.
- 7 That's why it's critical that we use all the tools
- 8 we have at our disposal to urgently reduce greenhouse
- 9 gas emissions through policies and investments that
- 10 engage and benefit all people, from the manufacturing
- workers who build the vehicles of the future to the
- 12 people who drive them, from the communities where
- they're made to the communities where they're driven.
- 14 Strong clean vehicle standards accompanied by
- policies to rebuild manufacturing are critical to
- 16 achieving these aims.
- 17 Returning to a strong trajectory of vehicle
- emissions reductions can put the U.S. back in the
- 19 leadership role and clean vehicle deployment and
- 20 manufacturing innovation.
- Research from the BlueGreen Alliance and the
- 22 Natural Resources Defense Council shows that strong

- 1 vehicle standards represent a critical foundation of
- 2 domestic certainty for jobs supporting manufacturing
- 3 investment across the United States.
- 4 Over the past decade, auto parts and materials
- 5 manufacturing workers rose to the challenge of building
- 6 the technologies needed to meet the 2010 and 2012
- 7 vehicle standards. Those strong standards, coupled
- 8 with reinvestment in domestic manufacturing, helped
- 9 bring back good jobs after the last recession. They
- 10 have spurred rapid investment in assembly facilities
- and in the supply chains building fuel economy and
- 12 enhancing technology.
- The weakening of these standards under the past
- 14 Administration put jobs at risk and threatened the
- 15 health of the industry as a whole. We can't afford to
- 16 fall behind, particularly as our global competitors are
- 17 proactively moving to capture the gains from the shift
- 18 to EVs already underway.
- Coupling ambitious standards with auto sector
- 20 investment is key to capturing opportunities for
- workers and communities to partake in the equitable
- transition to the next generation of clean vehicles.

- 1 The EPA can leverage its clean vehicle standards
- 2 to drive innovation and deliver fuel savings and
- 3 pollution reduction for all types of vehicles that meet
- 4 all communities' needs.
- 5 Vehicle standards and manufacturing investment
- 6 will achieve deep GHG reductions, protect and create
- 7 good auto manufacturing jobs for workers of all
- 8 backgrounds, and ensure that those workers are the
- 9 center of building and deploying the EV fleet of the
- 10 future here in the United States.
- 11 Thank you.
- MS. THOMPSON: Thank you for your comment.
- The next speaker will be Doug Holmgren. You may
- 14 now unmute and please state your name and affiliation
- 15 for the record.
- MR. HOLMGREN: Thank you.
- My name is Doug Holmgren, and I'm here today as a
- 18 private citizen.
- I want to thank you for the opportunity to
- 20 testify.
- I come today to support and indeed vigorously
- 22 applaud the Biden Administration's swift action on

- 1 clean cars. I, like many others, am speaking to urge
- 2 the EPA to adopt Alternative 2.
- 3 You've heard many people speak about how it will
- 4 lead to greater savings and eliminate unnecessary
- 5 manufacturing loopholes. Those are wonderful
- 6 achievements if they can come about.
- 7 I, of course, am thinking more about the dire
- 8 climate crisis we face, like many other speakers you've
- 9 heard today and yesterday.
- 10 My family and I live in Portland, Oregon. Over
- the period of June 26, 27, and 28, 2021, Portland
- experienced a deadly heat wave. The city experienced
- the hottest temperatures on record. Day 1 was 108
- degrees, Day 2 was 112 degrees, Day 3 was 116 degrees.
- 15 Reliable news sources indicate that over a hundred
- 16 persons died in Oregon because of those days' excess
- 17 heat.
- These were just not a warm day in the summer. The
- 19 statistics show that these temperatures are way, way
- beyond any norm. There's something going wrong in the
- 21 climate. Now at least 60 of those deaths in my city
- 22 were in Portland.

- Over the past two summers, Oregon has experienced
- 2 record wildfires. As a result, our normally blue
- 3 summer skies are now often filled with smoke. Last
- 4 September 11th, 2020, Portland's air quality was ranked
- 5 the worst in the world because of the smoke from
- 6 wildfires burning on nearby Mount Hood.
- 7 So it shouldn't come as any surprise that
- 8 Portlanders view climate change not as a worrisome
- 9 problem to address some time down the road but as
- 10 something that requires our urgent attention and
- 11 action.
- The world's leading scientists are sounding the
- 13 alarm to lower CO2 emissions, last week releasing a new
- 14 report of all the latest science, calling this moment
- 15 "Code Red for Humanity."
- So, yes, it is imperative that we return to and
- 17 improve upon the Obama/Biden Administration targets for
- vehicle greenhouse gas emissions. Tragically, we lost
- 19 valuable time due to the malfeasance of the Trump
- 20 Administration. We must get back on track.
- The EPA is requesting comment on whether or not to
- 22 adopt a tighter five to 10 gram per mile greater

- 1 stringency for Model Year '26 CO2 gram per mile target,
- 2 the so-called Alternative 2. So here then is my
- 3 comment. Given all that is happening around the world,
- 4 why would we not adopt the most stringent CO2
- 5 requirement possible.
- 6 We cannot bow to the need to maximize profits in
- 7 manufacturing industries. We know what is required to
- 8 avoid more climate catastrophes. So let's just get on
- 9 with it. Please adopt tighter standards now.
- I thank you for this opportunity to speak before
- 11 you today.
- MS. THOMPSON: Thank you for your comment.
- The next speaker is Zach Pistora. Zach, we do not
- 14 currently have you listed on the list of attendees.
- 15 However, if you have joined using a different name, we
- invite you at this time to raise your hand and if you
- 17 dialed in, you can do so by dialing Star 9 on your
- 18 phone.
- 19 (No response.)
- MS. THOMPSON: The next speaker on our list is
- Jackie Garcia Mann. Jackie, we also do not see you
- listed among the attendees. However, we would invite

- 1 you to also raise your hand by either dialing Star 9 on
- your phone or pressing the Raised Hand button at the
- 3 bottom of your screen.
- 4 (No response.)
- 5 MS. THOMPSON: We will move on to the next
- 6 speaker.
- 7 The next speaker is Tracy Sabetta. Tracy, you may
- 8 now unmute and please state your name and affiliation
- ⁹ for the record.
- MS. SABETTA: Good morning. My name is Tracy
- 11 Sabetta, and I'm with Moms Clean Air Force in Ohio.
- 12 Thank you so much for the opportunity to speak
- with you today in support of an EPA proposal to set the
- 14 strongest possible federal clean car standards through
- 15 2026.
- 16 As I mentioned, my name is Tracy Sabetta. I'm a
- mother and a member of Moms Clean Air Force from
- 18 Pickerington, Ohio, which is just outside of Columbus.
- Ohio ranks fifth in the number of cars sold by
- 20 state and lags embarrassingly behind in public transit
- 21 and infrastructure and opportunities.
- We are a proud automotive manufacturing state

- dating back to the introduction of the Allen Model in
- 2 Fostoria, Ohio, in 1913. We have a rich history in
- 3 producing combustion engines and supporting the supply
- 4 chain that goes along with it.
- 5 My own family is proud to include two generations
- of Ohio autoworkers. Throughout the decades, the
- ⁷ industry here has had to adapt to ever-changing
- 8 customer demands and advances in automotive technology
- 9 and design. Ohio's workforce has risen to meet those
- demands every time and now we must rise to the occasion
- 11 again, putting automakers back on track to meet
- 12 ambitious pollution reduction goals by acting swiftly
- 13 to develop these standards.
- 14 The Biden Administration is taking a critical
- 15 first step to tackle climate pollution from
- 16 transportation.
- According to the U.S. Energy Information
- 18 Administration, Ohio ranks seventh in the nation for
- the amount of total carbon pollution. The American
- 20 Lung Association's 2021 State of the Air Report also
- 21 indicates that nearly 200,000 Ohio children are
- 22 currently battling asthma.

- We see racial disparities in these asthma rates as
- 2 low-wealth and BIPOC communities experience
- 3 disproportionate harm from vehicle pollution.
- 4 Adopting strong clean car standards that will
- 5 limit pollution from dirty vehicles would subsequently
- 6 help advance environmental justice, addressing
- 7 inequitable transportation-related health impacts and
- 8 protecting our most vulnerable.
- 9 We know that pollution from the transportation
- sector accounts for about 29 percent of the total U.S.
- 11 greenhouse gas emissions, making it the largest
- 12 contributor.
- Between 1990 and 2019, transportation sector
- 14 pollution increased more in absolute terms than any
- 15 other sector.
- I'm fortunate that my daughter was not born with a
- 17 respiratory illness but many of her friends were not
- 18 that lucky. Pollution increases the frequency and
- 19 severity of their asthma attacks and robs them of the
- opportunity to be a kid enjoying the outdoors the way
- 21 most of us did as children.
- 22 Extreme heat here in Columbus has closed 20

- 1 buildings in our city school district today, slated to
- 2 be the first day of school for these kids.
- 3 To reduce these harmful pollution levels and dire
- 4 climate impacts and set us on the path to 100 percent
- 5 zero emissions new vehicles by 2035, the near-term
- 6 standards for climate pollution must be as strong as
- 7 possible.
- Please do not accept options that allow loopholes
- 9 for automakers that may undermine otherwise strong
- 10 pollution reduction targets.
- 11 As you've heard, Alternative 2 would put 400,000
- extra electric vehicles on the road by 2026 and result
- in 130 million metric tons fewer greenhouse gas
- 14 emissions.
- I urge you to adopt the strongest standards
- 16 possible for passenger cars and light trucks through
- 17 2026.
- On behalf of the nearly 81,000 Moms Clean Air
- 19 Force members in Ohio, I thank you for this opportunity
- 20 to testify today and urge you to go that extra mile to
- 21 protect our children's health from transportation
- 22 pollution. Thanks so much.

- 1 MS. THOMPSON: Thank you for your comment.
- The next speaker will be Rita Smith. Rita, you
- may now unmute and please state your name and
- 4 affiliation for the record.
- MS. SMITH: My name is Rita L. Smith. Good
- 6 morning.
- I come as an African American woman, wife, mother,
- 8 grandmother, retired educator, member of the United
- 9 Methodist Women Program Advisory Group, Delta Sigma
- 10 Beta Sorority, Incorporated, and the Poor People's
- 11 Campaign.
- I urge the EPA to set the strongest possible
- 13 federal clean car standards to ensure we are protecting
- 14 families from vehicle pollution.
- 15 My testimony is about my granddaughter Marnie born
- with asthma. Clean air is a good start by allowing the
- 17 car industry to build more efficient cars.
- The transportation industry pollutes the air,
- 19 causing my granddaughter to keep an asthma pump with
- 20 her and one at school. While in elementary school a
- few years ago, she had an asthma attack and here in
- 22 Chicago, all Chicago public school nurses are not in

- 1 their schools every day. While waiting for her school
- 2 bus (Audio glitch.) All the transit buses, all the
- 3 cars that were polluting the air.
- 4 See, this is my reality. Polluted air caused my
- 5 granddaughter and other school-aged children missed
- 6 days at school, absent days of instruction and learning
- 7 (Audio glitch) as a Christian to be a good stewards.
- 8 When I learned the United Methodist Women were
- 9 making climate change a priority, I knew I had to get
- 10 involved. So through my learning process, (audio
- 11 glitch) tailpipe pollution. I knew that could not be
- 12 good.
- The health of low-income families and communities
- of color disproportionately damaged by tailpipe
- pollution and rolling back fuel economy standards means
- denying them the promise of cleaner air and a healthy
- 17 community.
- Compared to non-Hispanic white children, Latino
- 19 children are twice as likely to die from asthma.
- 20 African American (audio glitch.)
- MS. THOMPSON: It appears that we may have lost
- 22 connection.

- 1 MS. SMITH: Excuse me. I'll continue.
- The change I would like to address is for the
- 3 automotive industry, the manufacturers of cars, trucks,
- 4 military vehicles, farm machinery, actually all
- 5 vehicles to eliminate gas emission from fossil fuel.
- 6 By implementing the strongest possible fuel
- 7 economy standards, the EPA would be following through
- 8 on the stated commitment to environmental justice
- 9 because issuing stronger clean car standards will help
- 10 address transportation-related impacts.
- 11 Why? So that those with respiratory health issues
- 12 like my granddaughter with asthma and those with
- pneumonia, bronchitis, and eye irritants would be able
- 14 to breathe easier and eventually be less impaired.
- With cleaner transportation vehicles, African
- 16 American children like my granddaughter would not miss
- school due to respiratory problems.
- Our air quality would be better for the world. We
- 19 would have healthier children and adults. Our
- 20 population would have lower respiratory health issues.
- The air quality would be better for all and the
- 22 schoolchildren would have better school attendance.

- 1 I'd like to thank you for this opportunity to
- voice my reality.
- MR. OLECHIW: Ms. Smith, if I could ask one
- 4 question. Thank you so much for your testimony.
- Will you be submitting your comments in written
- 6 form, also, because there was some audio in there? We
- 7 got the majority of your comments. We did not get all
- 8 of them.
- 9 MS. SMITH: Oh, okay. I can.
- MR. OLECHIW: Okay.
- MS. SMITH: I will.
- MR. OLECHIW: That'd be perfect. Thank you so
- 13 much for that, and --
- MS. SMITH: Okay. Thank you for asking.
- MR. OLECHIW: Okay. And if you want to e-mail
- them to us, we could also facilitate that. That's
- possible. So thank you.
- MS. SMITH: Okay. We'll do that. Thank you.
- MS. THOMPSON: Thank you for your comment.
- 20 As a reminder, if you are speaking today, you will
- 21 receive a notification on your screen that you are
- being promoted to the role of panelist shortly prior to

- 1 your speaking time. You must accept that invitation to
- 2 be able to unmute when you are called to testify. This
- 3 will also allow you to turn on your camera which we
- 4 encourage you to do.
- 5 Speakers connected by telephone should unmute
- 6 their phones when called to testify.
- If you have joined using a name other than what is
- 8 listed on the speaker list or have dialed in, we ask
- 9 that you please raise your hand when called on so we
- 10 can promote you to the role of panelist. If you have
- 11 dialed in, you can raise your hand by dialing Star 9.
- 12 If you are having technical difficulties, please
- send an e-mail to public_hearing@abtassoc.com or call
- 14 919-294-7712. If you are not registered to speak but
- 15 you would like to, please send an e-mail with your name
- and phone number to public_hearing@abtassoc.com.
- 17 The next speaker will be Lynn Rambo-Jones. Please
- unmute and state your name and affiliation for the
- 19 record.
- 20 (No response.)
- MS. THOMPSON: To unmute you will need to click
- the Unmute Button on the lower left-hand side of your

- 1 screen.
- MS. RAMBO-JONES: You got me?
- 3 MS. THOMPSON: Yes.
- 4 MS. RAMBO-JONES: Okay. Hello. My name is Lynn
- 5 Rambo-Jones, and I thank you for the opportunity to
- 6 speak to you today. I am a retired private citizen who
- 7 was employed by Oklahoma's Medicaid Agency as their
- 8 Administrative Law Judge.
- 9 As part of my job, I often dealt with federal
- 10 regulators on policy issues. Many times I felt
- 11 frustrated with the length of time required to get what
- 12 I felt were easy advancements of fixes shepherded
- through the process. The Feds, as we called them, had
- their own reasons, good and bad, for what they did.
- While many were helpful, most were not planning
- their long-term employment as bureaucratic employees.
- When your job is a stepping stone, you often make
- decisions that are different from those lifers who plan
- 19 to stay on task for 30 years.
- The fact that the second timeline proposed is
- 21 almost 30 years away frightens me. The fact that its
- 22 goal is a policy reduction is even worse. Leaving

- 1 federal service for a large industry paycheck is a
- 2 common practice and could change the long-range plans
- 3 and standards.
- We do not have the luxury of waiting for the
- 5 timeline as proposed. The ocean currents are slowing
- 6 down. It's raining in Greenland which is melting their
- 7 ice along with the Antarctic iceberg cap. Drought is
- 8 burning up the Middle East and Africa. Starvation is a
- 9 rapidly growing danger, and there are whole towns in
- 10 America that are moving uphill to avoid flooding. This
- 11 list seems endless.
- The United Nations has hit the panic button on the
- 13 rosy 10-year projection we have all heard about. If we
- 14 are aiming for improvement by 2026 or the slightly more
- stringent 2030 goals, all new cars will either have to
- 16 float or be fireproof which is an issue of today's
- 17 electric cars.
- These are things that keep me up at night. Those
- of us who are paying attention are afraid. It makes no
- sense to let automakers make aspirational promises
- 21 rather than tightening regulations that will have teeth
- 22 for the long-term.

- In Oklahoma, the bigger the truck, the prouder you
- ² are. That coupled with the continued reluctance by the
- 3 Biden Administration to shut down the construction of
- 4 polluting Tar Sands Pipeline shows at best an
- 5 ambivalent attitude towards promises made about our
- 6 green future.
- 7 This angers people who feel duped by broken
- 8 campaign promises. We must bring to bear the attention
- 9 that seems to have gotten really intense focus during
- 10 the World Wars.
- 11 Of course, I would advocate for the strictest
- 12 possible standards with rewards going to auto companies
- that achieve results. The health benefits that would
- 14 be reaped would result in reduced illness and deaths.
- 15 It will improve some of the social injustice issues
- that have fallen on marginalized groups in the United
- 17 States, but if more is not done now, America will not
- 18 catch up with the progress made in a number of other
- 19 countries, including China which is the beneficiary of
- 20 all that Tar Sands we are endangering our standards to
- 21 send to them.
- There is not much glory in almost achieving

- 1 standards from the Obama Administration tenure. We
- can't settle for half measures. These issues are all
- important and inter-related, expensive no doubt but
- 4 less so than losing the West Coast, New York, and
- 5 Miami.
- 6 We are balancing on the razor's edge and I have
- young grandchildren that I want to survive. 7
- I appreciate your time and attention and the 8
- opportunity to speak today.
- 10 MS. THOMPSON: Thank you for your comment.
- 11 The next speaker will be Zach Pistora.
- 12 now unmute and please state your name and affiliation
- 13 for the record.
- 14 MR. PISTORA: Good morning. Can you hear me?
- 15 MS. THOMPSON: We can.
- 16 MR. PISTORA: Zach Pistora from Lynwood, Kansas.
- 17 I'm the proud lobbyist for the Kansas Chapter of Sierra
- 18 Club.
- 19 As you know, the Sierra Club is one of the oldest
- 20 and largest grassroots environmental organizations
- 21 across the country and we have about 5,000 dues-paying
- 22 members here in Kansas and they're lobbyists for 10

- 1 years now.
- It's great to be here with you all and just as a
- point, you know, the Sierra Club dedicates itself to
- 4 advocating for the mission of protecting the
- 5 environment and do so in our personal accord and as an
- 6 organization, but you all as EPA officials, you know,
- 7 that's the day-to-day work. So from the bottom of my
- 8 heart, I appreciate it. It means so much to our well-
- 9 being and to our well-being going forward for future
- 10 generations.
- 11 So I wish I could, you know, shake everyone of
- 12 your hands and hear each of your personal stories
- because each of you are making a difference by making
- 14 these proposed regulations today to do everything we
- 15 can to help increase fuel efficiency for our light-duty
- 16 trucks and passenger cars.
- I think about each and every one of you and the
- impact you personally can make but also each of you has
- 19 a story, life experience, and I think about if each --
- you know, thinking about ourselves individually, if we
- think about everyone else out there could potentially
- 22 be impacted by better standards for a better life, for

- 1 better respiratory health, to not develop any asthmatic
- 2 problems or harmful illness from deadly air pollutants
- 3 that are polluted by cars and trucks today.
- 4 So I just think about that and we have the power,
- 5 we have the opportunity, we have the moral obligation
- 6 to do more, then why aren't we? We can have a lot of
- 7 benefits and pushing for better efficiency when it
- 8 comes to transportation, especially as one of the
- 9 biggest outputs for greenhouse gas emissions that are
- 10 increasingly becoming dangerous, more dangerous all the
- 11 time.
- 12 I think about what's going on across the world.
- 13 We had our hottest month ever in July. We had one of
- 14 the hottest months ever just a few months ago, the
- 15 hottest June record for America.
- I think about the people that are getting washed
- away by rivers and water in Tennessee but facing
- wildfires in the West and hurricanes and other severe
- 19 storms we see from flooding to drought here in Kansas.
- So I would just say to encourage you to get the
- 21 strictest standards possible. There's a lot on the
- line here, and there's a lot to be done, but there's

- 1 also a lot of benefit. Think about the economic
- 2 benefit we understand from pushing technology to do
- 3 more to meet our challenges of today.
- 4 So we'd like to get 60 percent emissions reduction
- of vehicle sector by 2030. We'd like to see half of
- our fleet to be electrical by 2030, but we probably
- ⁷ should push even faster than that, but certainly a
- 8 hundred percent electric vehicles to totally reduce
- 9 harmful emissions by 2035.
- You all know better than I do as far as what
- 11 loopholes we probably should end and ways that we can
- 12 improve environmental justice for black and Indigenous
- and people of color who are often more susceptible to
- 14 these respiratory illnesses and harmful effects and
- also bear the greatest burden of vehicle pollution
- 16 being closer to the roads, etcetera.
- So just on behalf of us here in Kansas, on behalf
- of myself and the future of my generation, those after
- us, you know, coming forward, we appreciate you taking
- the opportunity, the time and effort to hear all these
- 21 people through this public comment process and do
- 22 everything you can to improve our vehicle emissions

- 1 standards.
- 2 Thank you.
- MS. THOMPSON: Thank you for your comment.
- 4 The next speaker is Cinthia Moore. You may now
- 5 unmute and please state your name and affiliation for
- 6 the record.
- 7 MS. MOORE: Good morning. My name is Cinthia
- 8 Moore, and I am the Las Vegas Field Organizer for Moms
- 9 Clean Air Force and National Lead for EcoMadres.
- 10 Moms Clean Air Force is an organization of over
- one and a half million moms and dads nationwide with
- over 8,000 of those members in Nevada fighting for
- 13 clean air.
- 14 Today, I am calling in support of the EPA's
- proposal to strengthen greenhouse gas emissions
- 16 standards for cars and light trucks.
- 17 I'm calling from Las Vegas, a place that is well
- 18 known all over the world for its lights and
- 19 entertainment. However, one thing that's not known is
- that the American Lung Association's 2021 State of the
- 21 Air Report ranked Las Vegas Number 12 in the country
- for ground ozone pollution and Clark County ranked

- 1 Number 17 in the country for most polluted places to
- 2 live.
- Because of this, Moms Clean Air Force and Eco
- 4 Madres, we're very active in the Nevada Legislature
- 5 advocating for a bill which would close the smog check
- 6 loophole that our state had. This was important
- 7 because it was the first step in reducing smog
- 8 pollution from older, more polluting vehicles. We were
- 9 successful and on the last day of session this bill
- 10 passed and was signed by the Governor.
- While this was a major victory in our state and a
- 12 step in the right direction in improving our air
- quality, there's still a lot of work that needs to be
- done and there's only so much that can be done at the
- 15 state level.
- 16 Cleaning up vehicle pollution is one of the most
- important things we can do to fight climate change.
- 18 Improving our air quality is important for vulnerable
- 19 groups, like older Nevadans, and for children who lungs
- are still developing, and for Latino families who are
- 21 more likely to be exposed to air pollution.
- Latino children are 60 percent more at risk of

- 1 having asthma attacks exacerbated by air pollution and
- 2 40 percent more likely to die from an asthma attack.
- 3 Efforts to improve our air quality are
- 4 particularly important to me as the mother of a four-
- 5 year-old who has breathing problems and the parents of
- 6 over 40,000 children who have asthma in Clark County.
- 7 President Biden has promised to address climate
- 8 change and fight for environmental justice. By acting
- 9 swiftly on clean cars, the Administration has taken an
- 10 important first step in tackling climate pollution for
- 11 our transportation.
- The EPA must set the strongest possible federal
- 13 clean car standards through 2026, avoiding loopholes
- 14 and putting automakers on track to meet ambitious
- pollution reduction goals.
- This proposal is a step in the right direction to
- 17 address the climate emergency. Improving our air
- quality is an environmental justice issue. Everyone
- 19 has a right to breathe clean air.
- Thank you for your time.
- MS. THOMPSON: Thank you for your comment.
- The next speaker will be Linda Stout. Linda, you

- 1 may now unmute and please state your name and
- ² affiliation for the record.
- 3 As a reminder, you will need to unmute on your
- 4 phone in order for us to hear you.
- 5 MS. STOUT: Thank you for this opportunity to
- 6 testify.
- My name is Linda Stout, and I am a member of Moms
- 8 Clean Air Force. I also live in Las Vegas, Nevada.
- 9 Nevada is a scenic and beautiful state. Las Vegas
- 10 is among the driest and dustiest cities in the nation.
- 11 Automobile pollution exacerbates the breathing problems
- 12 associated with our sprawling desert community.
- In 2020, the American Lung Association stamped us
- 14 with an F for our failing air quality. This is why I
- 15 support our Administration's proposal to allow states
- 16 to adopt strong clean car standards.
- Over 26 million people in the United States,
- including my daughter, suffer from asthma. In Las
- 19 Vegas, casino employees breathe smoky indoor air and
- 20 polluted outdoor air. Winter temperature inversions
- 21 trap toxic pollution from cars, buses, and trucks,
- 22 especially in our densely-populated areas. As summer

- 1 temperatures soar, wildfire smoke mixes with the car
- ² pollution to create toxic smog. Indoors, natural gas
- 3 appliances release yet more toxins, further limiting
- 4 access to healthy air.
- 5 Las Vegas, a desert suburbia and car-centric city,
- 6 is a result of 40 years of unmitigated growth. New
- 7 home and road construction creates extensive dust
- 8 pollution and puts more cars on the road.
- 9 Additional cars means more days with unhealthy air
- 10 quality and more hazardous greenhouse gases and
- increased health problems.
- 12 IN the neighborhood where I raise my kids, I watch
- 13 new homes, businesses and public spaces expand further
- 14 and further into the desert. Schools, parks,
- libraries, and shopping centers are only a 15-to-30-
- 16 minute walk. An express bus route takes us to the
- 17 airport, the Strip, or the University of Nevada, Las
- 18 Vegas. It's walkable for me and I enjoy walking.
- 19 Yet while we traverse to school, played at parks,
- and waited at bus stops, we also breathed in the
- 21 pollution that ultimately contributes to our
- 22 respiratory problems.

- 1 My son, an avid mountain biker, rides his bike to
- work almost every day.
- Here's my dream. I imagine a day when the air we
- 4 breathe from our city walks and rides is as fresh as
- 5 the air in our nearby mountains. Infrastructure for
- 6 cleaner options is available right now. That's why I
- 7 wholeheartedly support the proposal allowing states to
- 8 establish clean car standards that protect our
- 9 children's health and their future.
- Thank you for allowing me to share my story.
- MS. THOMPSON: Thank you for your comment.
- The next speaker will be Tracy Babbige. You may
- 13 now unmute and please state your name and affiliation
- 14 for the record.
- MS. BABBIGE: Thank you.
- Good morning. I'm Tracy Babbige, the Air Bureau
- 17 Chief with the Connecticut Department of Environmental
- 18 Protection.
- I am testifying today on behalf of the National
- 20 Association of Clean Air Agencies for which I serve as
- 21 Co-Chair of the Mobile Sources and Fuels Committee.
- NACAA is the national nonpartisan, nonprofit

- 1 association of air pollution control agencies in 41
- 2 states, including a 115 local air agencies, the
- 3 District of Columbia, and four territories.
- 4 The air quality professionals in our member
- 5 agencies have vast experience dedicated to advancing
- 6 the equitable protection of clean air and public health
- 7 in the U.S. This testimony is based upon that
- 8 experience.
- 9 NACAA welcomes EPA's proposal to revise emission
- standards for Model Year 2023 through 2026 light-duty
- vehicles and commends the agency for placing a top
- 12 priority on seeking to rectify the 2020 rollback under
- the so-called SAFE 2 Rule of the 2012 National Clean
- 14 Car Standards.
- 15 As NACAA noted in its January 2021 Transition
- 16 Paper to the Biden Administration, increasingly
- 17 stringent standards to reduce emissions from passenger
- 18 cars and light trucks are urgently needed. Such
- 19 components are critical components to an overall
- strategy to further reduce greenhouse gas and criteria
- 21 pollutant emissions for passenger cars and light
- trucks, a significant contributor to climate change as

- 1 well as many non-attainment areas in the U.S.
- The proposal's benefits will provide progress in
- 3 the mission of our member agencies of attaining or
- 4 maintaining health-based national ambient air quality
- 5 standards and of addressing air quality impacts in
- 6 disproportionately-impacted communities.
- 7 These standards would also contribute to domestic
- 9 job growth, economic development, and fuel security.
- 9 As we have also noted, EPA should work to
- 10 ultimately return to a national program, one that
- 11 maintains the authority preserved to California and
- 12 other states under the Clean Air Act of vehicle
- emissions standards that is informed by science, is
- 14 protective of the climate, is developed in close
- 15 collaboration with California and other state and local
- air agencies, protects and preserves states' rights,
- 17 and delivers emission reductions essential for
- 18 achieving and/or maintaining environmental and public
- 19 health goals.
- NACAA is carefully reviewing the details of this
- 21 proposal and looks forward to working with EPA and
- other stakeholders to ensure a timely final rule with

- 1 appropriately robust standards that will lay a firm
- 2 foundation for a subsequent federal rulemaking with
- 3 progressively stringent standards and increased levels
- 4 of zero emission vehicle deployment.
- We appreciate the opportunity to participate today
- 6 and we will provide more detailed written comments by
- 7 the close of the comment period. Thank you.
- MS. THOMPSON: Thank you for your comment.
- The next speaker will be Bill Bradlee. You may
- 10 now unmute and please state your name and affiliation
- 11 for the record.
- MR. BRADLEE: Hi. My name is Bill Bradlee, and
- 13 I'm the National Organizing Director for Interfaith
- 14 Power & Light.
- 15 Can I go ahead and begin?
- MS. THOMPSON: Yes.
- MR. BRADLEE: Okay. Thank you.
- 18 Interfaith Power & Light's mission is to inspire
- and mobilize people of faith and conscience to take
- 20 bold and just action on climate change. We recognize
- that people of all faiths and spiritual traditions
- share a common bond, to care for their neighbor and the

- 1 planet that we all share.
- 2 So I'm here today to speak on behalf of my
- 3 organization as well as our state affiliates and more
- 4 than 6.5 million people of faith who are part of our
- 5 national network.
- 6 Here's what we have to say. We'd like to ask you
- 7 to go further than the current draft rule and revise
- 8 the standards beyond levels set during the Obama/Biden
- 9 Administration while not allowing credits and loopholes
- 10 to undermine the new rule.
- We ask that you put our country on track to reach
- 12 a hundred percent electric cars and light trucks no
- 13 later than 2035.
- 14 My understanding is that this requires at least 12
- percent to be electric by 2026 and 60 percent to be
- 16 electric by 2030, and the current draft rule does not
- 17 meet this need.
- In fact, UCS modeling indicates the current EPA
- draft rule would provide about 30 percent fewer
- 20 emissions reductions over the lifetime of the vehicles
- than would have been achieved under the Obama/Biden
- 22 2012 plan.

- 1 The benefits of a stronger version of the clean
- 2 cars rule would far exceed the costs. We'd see these
- 3 increased benefits through financial savings from
- 4 improved public health and reduced health care
- 5 spending, fuel savings, and reduced impacts from
- 6 climate change.
- A stronger rule is not only the right thing to do,
- 8 it's the financially smart thing to do, and it is clear
- ⁹ that creative and thoughtful policy is required to move
- 10 the industry quickly. We can see this from other
- 11 countries.
- 12 China's largest maker of lithium ion cells can
- 13 recycle the equivalent of what would be used in more
- than 200,000 cars and the company is able to recover
- most of the lithium, cobalt, and nickel.
- Where does the U.S. stand in this regard? It's no
- 17 accident that China, they have financial and regulatory
- incentives for battery companies that source recycled
- 19 materials rather than mining new metals.
- In another example of how policy can drive
- 21 innovation and change, Norway has significant taxes on
- 22 fossil fuel vehicles that represent their true cost to

- 1 the environment and public health. In 2020, all-
- 2 electric cars hit a record 54 percent market share of
- 3 Norway's total new car sales.
- 4 So I'll close with a last sentence of a recent
- 5 letter signed by nearly 1,600 clergy and faith leaders
- 6 who said about this revised rulemaking. "We urge you
- 7 to consider this moral opportunity to enact bold new
- 8 standards that truly envision the best for our
- 9 communities, our nation, and our world."
- So again I urge the EPA to take on this moral
- opportunity, I think you've heard that term a few times
- today, and help our country lead on climate solutions
- 13 by enacting the strongest standards to reduce vehicle
- 14 pollutions.
- Thanks for the opportunity to speak with you
- 16 today.
- MS. THOMPSON: Thank you for your comment.
- The next speaker on our list is Jose Acosta. We
- 19 do not currently have you listed among the list of
- 20 attendees. However, if you have joined using a
- 21 different name, we invite you to raise your hand at
- this time and if you have dialed in, you can raise your

- 1 hand by dialing Star 9 on your phone.
- 2 (No response.)
- MS. THOMPSON: Okay. We will now move on to the
- 4 next speaker.
- 5 The next speaker will be Deborah Bakker. You may
- 6 now unmute and please state your name and affiliation
- ⁷ for the record.
- MS. BAKKER: Good morning. I'm Deb Bakker. I'm
- 9 the Director of Regulatory Affairs for Hyundai America
- 10 Technical Center, and I appreciate the opportunity to
- 11 speak today.
- 12 Hyundai supports the Administration's goal of
- achieving 40 to 50 percent zero emission vehicle sales
- 14 by 2030. Meeting this electrification goal and the
- 15 foundation being laid by the GHG reductions proposed in
- the EPA NPRM will be very challenging and will require
- 17 a host of complementary measures to make it a reality.
- 18 Ensuring consumer demand, create resiliency,
- widespread infrastructure availability, green
- 20 electricity and hydrogen are just a few examples of
- 21 necessary complementary actions. These measures will
- only be realized with coordination between federal

- 1 agencies, automakers, and other stakeholders.
- 2 Hyundai's recent announcement supporting the path
- 3 to an electrified future include 12 Hyundai and Genesis
- 4 electrified and eco-focused models in the U.S. by 2022,
- 5 including hybrid, plug-in hybrid, battery electric and
- 6 fuel cell, with a total of nine SUVs and three sedans.
- 7 Hyundai has also announced a \$7.4 billion
- 8 investment in the U.S. by 2025 and part of that
- 9 investment includes new U.S. production of battery
- 10 electric vehicles.
- 11 A key technology for Hyundai is hydrogen fuel cell
- vehicles which we began developing in the early '90s.
- 13 In 2018, Hyundai announced its long-term roadmap called
- 14 Fuel Cell Vision 2030 which reaffirms our commitment to
- 15 accelerate the development of a hydrogen society. This
- technology is and will be used in light- and heavy-duty
- applications, urban air mobility, marine, and other
- 18 applications. Hydrogen vehicles are a practical, no-
- 19 compromise, zero emissions solution.
- 20 As stated in the NPRM, planned future
- 21 electrification are challenging and will require a
- 22 dramatic transformation. We recommend metric-based

- 1 checkpoints that ensure that all required components
- 2 for success, such as consumer acceptance,
- infrastructure, battery supply, grid resiliency, and
- 4 more, are in place as the aggressive electrification
- 5 path moves forward.
- 6 Continuing review is required and appropriate to
- 7 ensure complementary actions are well balanced.
- 8 Checkpoints provide an opportunity to address any
- 9 issues before they have negative impacts on the
- 10 program.
- We'll provide an outline in our written comments
- with a potential method to impartially assess whether
- the required support is aligned with the
- 14 electrification trajectory.
- Finally, we appreciate EPA's statement that it
- 16 remains committed to ensuring that GHG emissions
- 17 standards for light-duty vehicles are coordinated with
- 18 fuel economy standards. Regulatory efficiencies are
- 19 important.
- We will also provide comments regarding
- 21 harmonization and other areas in our written comments.
- Thank you for your time today.

- 1 MS. THOMPSON: Thank you for your comment.
- The next speaker will be Laurie Holmes. You may
- 3 now unmute and please state your name and affiliation
- 4 for the record.
- 5 MS. HOLMES: I'm Laurie Holmes, representing Motor
- 6 and Equipment Manufacturers Association, MEMA.
- 7 MEMA represents motor vehicle suppliers, the
- 8 nation's largest sector of manufacturing jobs in the
- country, directly employing more than 907,000 workers
- 10 in all 50 states.
- 11 Suppliers are responsible for providing 77 percent
- 12 of the value of a new vehicle. Suppliers are committed
- 13 to providing innovative, affordable, and accessible
- 14 technologies needed to meet the Administration's goal
- 15 of an economy-wide net zero emissions by 2050.
- 16 Motor vehicle suppliers have taken a leadership
- 17 position and the substantial associated risk in
- 18 investing significant resources in developing multiple
- 19 emissions, reducing technology solutions, including
- 20 electrified power trains, to assist vehicle
- 21 manufacturers.
- 22 Consequently, MEMA supports vehicle greenhouse gas

- 1 standards that are stringent but realistic and provide
- 2 needed regulatory certainty and stability for the
- 3 industry.
- 4 MEMA supports the EPA's approach of performance-
- 5 based standards that allow a broad spectrum of advanced
- 6 propulsion technologies. The Framework encourages a
- 7 wide range of electrification technologies while also
- 8 requiring further technology advances and innovation to
- 9 the internal combustion engine technologies.
- MEMA supports expanding the Off-Cycle Technology
- 11 Credit Program and increasing the credit cap. This
- 12 program expansion will encourage innovative
- 13 technologies that allow a broader range of technology
- options.
- Looking beyond 2026, MEMA stands ready to work
- with EPA to establish a holistic framework for long-
- 17 term greenhouse gas standards that are ambitious but
- 18 pragmatic.
- MEMA will continue to support a transition to
- 20 cleaner transportation. MEMA is committed to a shift
- 21 towards significantly higher levels of electrification
- while continuing to leverage American innovation to

- drive us toward a broad spectrum of advanced
- 2 technologies that can all play a part in meeting the
- 3 nation's goals.
- 4 MEMA urges policymakers at all levels to ensure
- 5 there is an overall comprehensive plan to prepare the
- 6 industry and the U.S. for this advanced transportation
- ⁷ future.
- The strategic plan should include both supply and
- 9 demand side policies, including investments in EV and
- 10 fuel cell infrastructure.
- Suppliers strongly support investments in further
- developing our skilled workforce, including training to
- 13 up=skill workers as these development needs are
- evolving with the transition to vehicle
- 15 electrification.
- 16 Again, vehicle suppliers take a leadership
- 17 position and significant risk in planning these
- 18 advanced technologies years in advance of deployment.
- 19 Cohesive complementary policies are essential to
- support vehicle suppliers and advance the industry's
- innovation and the nation's greenhouse gas goals.
- Thank you for consideration of these comments and

- 1 we plan to submit further comments in September.
- MS. THOMPSON: Thank you for your comment.
- 3 As a reminder, if you are speaking today, you will
- 4 receive a notification on your screen that you are
- 5 being promoted to the role of panelist shortly prior to
- 6 your speaking time. You must accept that invitation to
- ⁷ be able to unmute when you are called to testify. This
- 8 will also allow you to turn on your camera which we
- 9 encourage you to do.
- Speakers connected by telephone should unmute
- 11 their phones when called to testify.
- 12 If you have joined using a name other than what is
- listed on the speaker list or have dialed in, we ask
- that you please raise your hand when called on so we
- can promote you to the role of panelist. If you have
- 16 called in, you can raise your hand by dialing Star 9.
- 17 If you are having technical difficulties, please
- send an e-mail to public_hearing@abtassoc.com or call
- 19 919-294-7712. If you are not registered to speak but
- you would like to, please send an e-mail with your name
- 21 and phone number to public_hearing@abtassoc.com or call
- 22 919-294-7712.

- 1 The next speaker will be Representative Padma
- 2 Kuppa. We do not currently have you listed among the
- 3 list of attendees. However, if you have joined using a
- 4 different name, we invite you to raise your hand or
- 5 dial Star 9 on your phone if you have called in.
- 6 (No response.)
- 7 MS. THOMPSON: The next speaker on our list is
- 8 Melinda Fleming. Similarly, we do not have you listed
- 9 among the list of attendees. However, we also invite
- 10 you to raise your hand at this time.
- 11 (No response.)
- MS. THOMPSON: We will move on to the next
- 13 speaker.
- 14 The next speaker will be John Linder. John, you
- 15 may now unmute and please state your name and
- 16 affiliation for the record.
- MR. LINDER: Good morning. My name is John
- 18 Linder, President of the National Corn Growers
- 19 Association, and a farmer from Edison, Ohio.
- 20 As sustainable producers of the primary feedstock
- 21 for ethanol, corn farmers are a part of the solution to
- 22 cut emissions.

- 1 EPA's proposed vehicle greenhouse gas emissions
- 2 standards for 2023 -- sorry -- through 2026 is an
- 3 ambitious increase. We agree time is of the essence to
- 4 meet the Administration's goals for cutting U.S.
- 5 greenhouse gas emissions by half by 2030.
- The good news is corn farmers offer is that we
- 7 don't have to wait for reduced emissions. Thanks to
- 8 today's ethanol, we can use fuel available right now to
- 9 make a difference.
- Using higher volumes of ethanol is an immediate
- 11 way to lower emissions and more low-carbon fuels we
- 12 need to decarbonize the transportation on a timely and
- 13 affordable basis.
- 14 Ethanol now reduces emissions by about half
- compared to gasoline due to in large part a sustainable
- 16 production of corn.
- With our commitments to continued improvements
- 18 farmers are ready to ensure ethanol reaches net zero
- 19 emissions. That's why we encourage EPA to focus more
- on outcomes and open pathways for all fuels and
- 21 technologies. Allowing all solutions ensures we can
- take advantage of not only the low-carbon benefits of

- 1 higher ethanol blends but also the consumer cost
- 2 savings cuts toxic emissions and greater fuel
- ³ efficiency that come with more renewable.
- 4 Higher ethanol blends with advanced engines
- 5 optimize higher octane would provide a much-needed
- 6 pathway for automakers to meet stricter standards on
- 7 both GHG emissions and fuel economy.
- 8 Low-carbon/high-octane fuels would also support
- 9 any longer-term rulemaking to address vehicle criteria
- 10 pollutant and air toxic emissions.
- In addition, alternative fuels, such as flex fuel
- vehicles, will deserve a second look as a zero emission
- vehicle and could be incentivized to vehicles with
- 14 standard oils.
- That's why NCGA joined other stakeholders in
- 16 asking EPA for an opportunity to comment on the role of
- low-carbon/high-octane fuels and other pathways to
- advance climate, air quality, and environmental justice
- 19 goals for these and future standards.
- 20 EPA missed an opportunity in this proposal to
- 21 broaden the solutions and address transportation
- 22 emissions. We will provide more detailed written

- 1 comments, but we also urge EPA to use rulemaking for
- 2 2027 and beyond to eliminate barriers to higher ethanol
- 3 blends and consider fuel standards that will open the
- 4 door to achieve more emission reductions from
- 5 renewable, sustainable, and affordable ethanol.
- 6 Thank you.
- 7 MS. THOMPSON: Thank you for your comment.
- We want to ensure that we have not missed any
- 9 speakers who may have joined and so I will make one
- 10 last call for Representative Padma Kuppa and Melinda
- 11 Fleming. If you have joined, we invite you at this
- time to raise your hand and if you have called in, you
- can do so by dialing Star 9 on your phone.
- 14 (No response.)
- MS. THOMPSON: Okay. We are now at the end of our
- 16 morning session.
- 17 EPA, are you ready to recess until after the
- 18 scheduled lunch break?
- MR. OLECHIW: Yes. Thank you, Kayla.
- So I'd like to take this opportunity before we
- 21 break to thank all the speakers from this morning. The
- 22 EPA very much appreciates you taking the time to

```
1
    deliver your verbal comments.
         So we will break for a little bit over one half
2
3
    hour, reconvening at half past the hour, which on the
4
    East Coast would be 12:30.
5
         So with that, I will break the meeting and we will
6
    resume again at 12:30.
         Thank you so much.
7
8
          (Whereupon, the meeting was recessed for lunch, to
9
    resume at 12:30 p.m.)
10
11
12
13
14
15
16
17
18
19
20
21
22
```

1 AFTERNOON SESSION

- MS. THOMPSON: Good afternoon and welcome back to
- 3 the United States Environmental Protection Agency's
- 4 Public Hearing for the Revised 2023 and Later Model
- 5 Year Light-Duty Vehicle Greenhouse Gas Emissions
- 6 Standards.
- My name is Kayla Thompson from Abt Associates,
- 8 contractor for the U.S. EPA.
- 9 We are now ready to continue the Virtual Public
- 10 Hearing.
- I'll turn it over to EPA to get us started.
- MR. OLECHIW: Thank you, Kayla.
- 13 I'd like to take this opportunity to once again
- thank everyone that testified this morning. We very
- much appreciate you taking the time to deliver your
- 16 oral comments.
- Just a reminder that the purpose of this hearing
- is to receive oral testimony from interested parties
- 19 regarding EPA's Proposed Revisions to the Light-Duty
- 20 Greenhouse Gas Emissions Standards and with that, we
- look forward to hearing this afternoon's speakers.
- Thank you.

- MS. THOMPSON: Thank you.
- Before we resume the hearing, we'd like to go over
- 3 some logistics.
- 4 As a reminder, all attendees are muted
- 5 automatically.
- If you are speaking today, you will receive a
- 7 notification on your screen that you are being promoted
- 8 to the role of panelist shortly prior to your speaking
- 9 time. You must accept that invitation to be able to
- unmute when you are called to testify. This will also
- allow you to turn on your camera which we encourage you
- 12 to do.
- 13 Speakers connected by telephone should unmute
- 14 their phones when called to testify.
- 15 If you have joined using a name other than what is
- listed on the speaker list or have dialed in, we ask
- that you please raise your hand when called on so we
- can promote you to the role of panelist. If you have
- 19 called in, you can raise your hand by dialing Star 9.
- If you are having technical difficulties, please
- 21 send an e-mail to public_hearing@abtassoc.com or call
- 919-294-7712. If you are not registered to speak but

- 1 you would like to, please send an e-mail with your name
- and phone number to public_hearing@abtassoc.com or call
- 3 919-294-7712.
- 4 Now we will continue our public testimony. The
- 5 expected speaking order is currently displayed on the
- 6 screen. We ask that each person limit their verbal
- 7 testimony to three minutes. We encourage you to
- 8 provide your full written testimony and any additional
- 9 comments of any length to Docket Number EPA-HQ-OAR-
- 10 2021-0208 on regulations.gov.
- I will be introducing each speaker in turn.
- 12 Please speak slowly and clearly so our court reporter
- 13 can record these proceedings accurately.
- 14 Speaker Block 3
- MS. THOMPSON: The first speaker will be
- 16 Representative Padma Kuppa. Please state your name and
- affiliation for the record.
- MS. KUPPA: Thank you so much for having me today.
- 19 As you said, I am Padma Kuppa. I'm here today as
- ²⁰ a private citizen.
- 21 As a former automotive professional and a
- 22 mechanical engineer, I'm honored to be the state

- 1 representative for Michigan's 41st State House
- 2 District. I represent the Cities of Troy and Clawson
- in the Metro Detroit Area, and I'm glad to be here to
- 4 testify.
- 5 Thank you for the opportunity to voice my support
- 6 for setting our clean car standards back on track.
- 7 Many of my constituents are engineers in the automotive
- 8 industry and I know that they take their jobs seriously
- 9 and enjoy the cars we make here, whether it's at the
- 10 Woodward Dream Cruise or the Detroit Traffic Jam.
- I came to Michigan over two decades ago for the
- cars and stayed for the lakes and am very grateful to
- live in the state that is home to the world's largest
- 14 freshwater ecosystem.
- I feel the responsibility of it, too. As a
- 16 parent, I've always been conscious of the need to
- 17 protect our planet for the future generations and a
- 18 critical component of this is reducing vehicle
- 19 emissions and having stringent clean air standards.
- 20 As a former FCA employee, about 10 years ago I was
- 21 able to bring home my first electric car, a Fiat 500,
- the color of orange soda, but only for the weekends. I

- 1 brought it to our Product Engineering Department
- 2 picnics so that all my colleagues could also test it
- out and I really appreciate what had gone into creating
- 4 that vehicle and so did all of them, and we knew the
- 5 impact EVs would have in reducing emissions.
- 6 Many of my former colleagues are immigrants like
- 7 me with technical expertise and knowledge from
- 8 countries around the world that we honed in graduate
- 9 schools and in American universities and in our careers
- 10 here in Michigan.
- We bring to our jobs a belief in science that
- 12 empowers us to improve vehicle emissions. We have a
- work ethic that drives us also empowers innovation and
- 14 support for clean car standards so that our automotive
- 15 industry can deliver real-world emissions reductions
- 16 and set standards for others to follow around the
- world.
- 18 Engineers in Michigan work with colleagues around
- 19 the world. We understand the impact of our work on the
- 20 planet and all the people who live on it.
- Here in Michigan, we've invested in innovation
- throughout the automotive industry and work hard to

- 1 ensure that the U.S. remains an auto industry leader.
- 2 These standards have already gone through a rigorous
- 3 technical review process which found that auto
- 4 manufacturers have the technology to meet the
- 5 standards.
- I urge you to keep these standards as originally
- 7 designed to ensure the greatest reductions in fossil
- 8 fuel use and global warming emissions.
- 9 Thank you for the opportunity to testify today
- 10 alongside a stream of environmental and public health
- 11 associates.
- MS. THOMPSON: Thank you for your comment.
- 13 The next speaker will be Frederick Tran.
- 14 Frederick, we do not currently have you listed among
- the list of attendees. However, if you have joined
- 16 using a different name, we would invite you to raise
- 17 your hand at this time.
- 18 (No response.)
- MS. THOMPSON: Okay. We will move on to the next
- 20 speaker.
- The next speaker will be Qiunta Warren. You may
- 22 now unmute and please state your name and affiliation

- 1 for the record.
- DR. WARREN: Thank you for this opportunity to
- 3 speak.
- 4 My name is Dr. Qiunta Warren, and I am the
- 5 Associate Director of Sustainability Policy at Consumer
- 6 Reports.
- Our analysis shows that the proposed clean cars
- 8 ruling is a good start to putting us back on track to
- 9 50 percent electric vehicles by 2030.
- However, the EPA's preferred alternative recovers
- only 75 percent of the lost benefits from the
- 12 Obama/Biden Administration's standards.
- 13 Consumer Reports survey results show that
- 14 consumers want more access to clean cars and we need
- 15 regulations at least as strong as the Obama/Biden
- 16 Administration's standards to deliver them.
- Recent reporting has also shown that the White
- 18 House and other Administration officials told EPA that
- 19 its industry-backed plan for tightening auto emissions
- limits was too lax, but the agency still released this
- 21 proposal with provisions that lessen its bite.
- The Biden Administration has committed to slashing

- 1 greenhouse gas emissions by 50 percent by 2030, making
- 2 a 60 percent reduction in greenhouse gas emissions from
- 3 new passenger vehicle sales by 2030 absolutely
- 4 necessary.
- 5 This reduction would not only benefit the
- 6 environment, it would also save consumers approximately
- 7 \$1.6 trillion through 2050.
- In order to strengthen the proposed ruling, the
- 9 EPA can shift to Alternative 2 which is a stronger 2026
- 10 standard and close the loopholes that have been
- 11 afforded to the automakers. These loopholes include EV
- 12 multipliers and increased off-cycle credits.
- 13 It's also worth noting that automakers agreed to
- 14 meet stronger standards almost a decade ago. If they
- were able to meet more stringent standards then, they
- should be able to do so today and in the future.
- 17 As a person of color, I am extremely concerned
- 18 about the impacts of climate change on communities of
- people who look like me. Data shows that low-wealth
- 20 communities and communities of black, Indigenous,
- 21 persons of color experience disproportionate harm from
- 22 climate change.

- 1 The Biden Administration has previously stated its
- 2 commitment to environmental justice and it can
- demonstrate this by addressing transportation-related
- 4 discriminatory impacts.
- 5 There is inherent inequity in the car marketplace
- 6 as Consumer Reports research has found that new car
- ⁷ buyers are predominantly whiter and older and they
- 8 determine what vehicles end up on the used car market.
- 9 Expanding consumers choices of clean vehicles will
- 10 also benefit those that cannot afford to enter the new
- 11 car market.
- 12 I'd like to close by thanking the Biden
- 13 Administration again for this proposal and urging the
- 14 EPA to close the loopholes and ensure that no
- 15 communities are left behind.
- 16 I'll remind you again that a 2030 target of 60
- percent reduction in greenhouse gas emissions would
- also save consumers \$1.6 trillion by 2050.
- 19 Thank you for your time.
- MS. THOMPSON: Thank you for your comment.
- The next speaker will be Sam Spencer. You may now
- 22 unmute and please state your name and affiliation for

- 1 the record.
- MR. SPENCER: Thank you very much.
- My name is Sam Spencer. I most recently served as
- 4 the Chair of the Charlotte-Mecklenburg Planning
- 5 Commission in Charlotte, North Carolina, but today I'm
- 6 speaking as a private citizen.
- 7 In Charlotte and our entire Metropolitan Region,
- 8 we've experienced tremendous growth during my lifetime
- 9 and for the past six years, on our Planning Commission
- 10 I've had the opportunity to see that growth not only
- 11 from a qualitative perspective but from a quantitative
- 12 standpoint.
- So here's the story that data tells. According to
- 14 Charlotte DOT data, Charlotte's growth is generating
- over 25 million new car trips every year and that's
- only from rezoning, not by buy-right development.
- 17 Conservatively, that's tens of millions of
- 18 kilograms of new carbon dioxide emissions in the
- 19 Charlotte region every year. It's a major equity issue
- 20 for Charlotte.
- Low-income, black, and immigrant communities
- 22 experience disproportionate harm from dirty vehicle

- 1 pollution leading to increased rates of asthma and
- other respiratory illnesses.
- It's one of the main reasons I'm testifying today
- 4 because it is so important to our growing city for the
- 5 EPA to implement the strongest possible vehicle
- 6 pollution standards.
- 7 Issuing stronger clean car standards will not only
- 8 address these transportation-related impacts but also
- 9 help the EPA follow through on its commitment to
- 10 environmental justice.
- 11 Like many growing Sunbelt cities, Charlotte is a
- 12 sprawling metropolis. It's one of the reasons we
- 13 recently wrote a new comprehensive plan to pave the way
- 14 for denser, more environmentally-friendly development.
- 15 We took inspiration from Seattle's Commute Trip
- 16 Reduction Program, Chicago's 2020 ETOC Plan, and
- 17 Charlotte's own Strategic Energy Action Plan.
- Our 2040 Plan commits to transit-oriented
- development, safe and equitable mobility, protecting
- our tree canopy, and making our buildings and vehicle
- 21 fleets carbon-neutral, and, importantly, reducing per-
- 22 capita carbon emissions in the city.

- 1 The Number 1 source of carbon emissions in
- 2 Charlotte is vehicle trucks. We can't make significant
- 3 progress on emissions reductions without a strong
- 4 federal rule and, unfortunately, the EPA's proposed
- 5 rule doesn't go far enough.
- It is far too weak to achieve the climate progress
- 7 we need and contains loopholes that would allow auto
- 8 manufacturers to continue to double down on gas-
- 9 quzzling vehicles.
- The proposal would also result in much less
- 11 pollution reduction than the auto industry already
- 12 agreed to in 2012, nearly a decade ago.
- So for sprawling southern cities, like mine, that
- 14 have to work with state legislatures that ignore
- 15 climate science, it just isn't good enough. The EPA
- 16 should finalize the strongest possible clean car
- 17 standards to protect our communities from vehicle
- 18 pollution, save drivers and sprawling cities like mine
- 19 from spending more money at the pump and fight climate
- change.
- You have a prime opportunity to strengthen these
- 22 standards and protect our climate, public health, and

- 1 the economy by ensuring clean car standards are as
- 2 strong as possible and for my city, my family, and our
- 3 neighborhoods, I sincerely hope you take it.
- 4 Thank you very much.
- 5 MS. THOMPSON: Thank you for your comment.
- 6 The next speaker will be Cinthia Williams. You
- 7 may now unmute and please state your name and
- 8 affiliation for the record.
- 9 MS. WILLIAMS: Good afternoon. I'm Cinthia
- 10 Williams. I'm the Global Director, Sustainability,
- 11 Amalgation, and Compliance for Ford Motor Company.
- 12 I spent nearly 30 years working on emissions and
- 13 sustainability. Combating climate change is a human
- 14 rights issue and a strategic priority for our company
- and that's why we are proud to be the only full line
- 16 American automaker committed to reducing greenhouse gas
- 17 emissions in line with the Paris Agreement and standing
- with California for stronger greenhouse gas emissions
- 19 standards.
- We applaud the Biden Administration's goal of
- reaching an electric vehicle future and leadership on
- 22 reducing emissions and investing in critical

- 1 electrification infrastructure.
- We believe that making great vehicles for our
- 3 customers, protecting the environment, and maintaining
- 4 a strong business depend on each other.
- For us, that's why we're electrifying our most
- 6 iconic nameplates. That includes the most popular
- 7 vehicle in America, the F-150, the electric Mustang
- 8 Mach-E, and the popular Transit Van used by businesses
- 9 across the country.
- We're investing more than \$30 billion by 2025 in
- 11 electrification. We're committed to leading the
- 12 electrification revolution and creating American jobs.
- Turning now to the proposed rulemaking, Ford
- 14 supports the proposals that encourage production of
- 15 zero emission vehicles and we support the manner in
- which the EPA has proposed the greenhouse gas emissions
- 17 standards.
- Because forward-looking manufacturers like Ford
- 19 are making improvements that provide real environmental
- benefits, the proposal recognizes a range of compliance
- 21 mechanisms, like reducing greenhouse gas emissions,
- 22 improving air conditioning to minimize refrigerant

- 1 leakage, and advanced technologies, like electric
- 2 vehicles.
- We appreciate both EPA and NHTSA to harmonize a
- 4 greenhouse gas and fuel economy standards and we know
- 5 that you will consider the time that it takes to design
- 6 and develop the advanced technologies needed to address
- ⁷ the urgent climate crisis.
- 8 Taken together, the broad elements of the proposal
- 9 are stronger than the SAFE Program and puts us back on
- 10 track to combat climate change and meet President
- 11 Biden's ambitious vehicle electrification goals.
- Finally, to achieve a zero emissions future, we
- 13 need collaboration among government, industry, and
- 14 stakeholders. To meet this moment, all of us will need
- to hold conversations like this one to set and achieve
- 16 ambitious goals.
- 17 At Ford, we are doing our part developing high-
- quality and zero emission vehicles, combining that with
- our legendary ability to build them at scale. We
- 20 expect to be well positioned to have fully electric
- vehicles account for 40 to 50 percent of our sales by
- 22 2030.

- We appreciate the opportunity to testify here
- 2 today. At Ford, we intend to continue building our
- 3 legacy of sustainability and to help build a better
- 4 world where every person is free to move and pursue
- 5 their dreams.
- Thank you and I will take any questions.
- 7 MS. THOMPSON: Thank you for your comment.
- 8 The next speaker will be Nicole Marcot. You may
- 9 now unmute and please state your name and affiliation
- 10 for the record.
- 11 MS. MARCOT: Hi. I'm Nicole Marcot. I'm a
- 12 volunteer with Moms Clean Air Force. Thanks for the
- opportunity to testify.
- I live in Detroit, Michigan, and I'm the mother of
- three young children as well as an educator in a
- 16 predominantly low-income section of the city.
- 17 I'm deeply concerned about the effects air
- 18 pollution and climate change have on the health of my
- 19 community and on our children's future. So I support
- this Administration's proposal to strengthen greenhouse
- 21 gas emissions standards for cars and light trucks.
- 22 My community in Detroit is a low-wealth community

- 1 near a major highway system and my parents, who live in
- the same neighborhood as us, suffer from asthma as do
- many other people in my neighborhood. As many as 15
- 4 percent of adults and 11 percent of children in Detroit
- 5 suffer from asthma.
- As an educator, I've frequently witnessed children
- 7 missing school because of asthma. In addition to
- 8 asthma, heart disease is also a major health concern.
- 9 In the past year and a half, three of my neighbors have
- 10 passed away from health issues related to heart
- 11 disease.
- 12 According to Yale University, vehicles are the
- 13 leading cause of air pollution and this pollution
- 14 causes a variety of health issues in humans, including
- 15 asthma and heart disease.
- Residents of my community are predominantly people
- of color and studies have shown that low-wealth and
- 18 black and Indigenous, people of color communities
- 19 experience disproportionate harm from dirty vehicle
- 20 pollution, leading to racial disparities in rates of
- 21 asthma and heart disease.
- 22 Aside from the direct impacts of air pollution,

- 1 here in Detroit we've been hit with drastically
- increasing amounts of extreme weather. Just last week
- 3 we were without electricity for six days due to a storm
- 4 that swept through Southeast Michigan and left close to
- 5 a million customers without power. Please note that
- 6 once again it is low-income communities that suffer the
- 7 most from extreme weather. Wealthy communities and the
- 8 suburbs had their electricity restored much sooner than
- 9 we did.
- This extreme weather is a direct result of climate
- 11 change and will only grow worse if immediate and strong
- 12 action is not taken.
- 13 The future of my three young daughters is at stake
- 14 along with the lives of children across Detroit,
- 15 Michigan, the United States, and the world.
- Given that the transportation sector is the
- 17 largest source of carbon pollution in the U.S.,
- 18 cleaning up vehicle pollution is one of the most
- 19 important things we can do to fight climate change.
- I'm urging EPA to set the strongest possible
- 21 federal clean car standards through 2026, avoiding
- loopholes and putting automakers on track to meet

- 1 ambitious pollution reduction goals.
- 2 Thanks for your time.
- MS. THOMPSON: Thank you for your comment.
- 4 The next speaker will be Darien Davis. You may
- 5 now unmute and please state your name and affiliation
- 6 for the record.
- 7 MS. DAVIS: Hello and thank you for giving me the
- 8 opportunity to testify on the SAFE 2 Rule today.
- 9 My name is Darien Davis, and I'm a Government
- 10 Affairs Advocate for Climate and Clean Energy at the
- 11 League of Conservation Voters or LCV.
- 12 I'm here today on behalf of LCV's more than two
- 13 million members and a network of 30 state partner
- organizations across the country.
- I appreciate the Biden Administration's swift
- 16 action on clean car standards. It is clear that
- undoing the harmful rollbacks of the previous
- 18 Administration has been a top priority since Day 1.
- Now that the proposed rule is out, I urge the EPA
- to create the strongest possible limits on vehicle
- 21 pollution. The EPA should seek to finalize Alternative
- 22 2, the strongest standards the EPA analyzed on the

- 1 proposal.
- In order to tackle the climate crisis at the speed
- 3 and scale that science demands, we need standards that
- 4 will reduce 60 percent of carbon emissions from new
- ⁵ cars by 2030.
- On the heels of a clarion IPCC report, it is clear
- 7 that climate change is directly contributing to more
- 8 severe and frequent wildfires, hurricanes, and flooding
- 9 around the world. The most recent report is especially
- 10 salient because it shows specific regional climate
- 11 impacts.
- Here in California where I'm currently visiting
- with my family, wildfires have been raging at an
- unprecedented rate. These wildfires both threaten the
- 15 safety of families like mine while also contributing to
- 16 hazardous air quality.
- 17 In recent years, there have been days when the
- 18 smog from fires was so thick my parents would have to
- 19 leave work early and stay indoors to safeguard their
- 20 home.
- There is, however, a practical way to begin
- 22 tackling climate change: focusing on clean

- 1 transportation. Since the transportation sector is the
- 2 largest source of emissions, bold car standards to help
- 3 accelerate the transmission from cars with internal
- 4 combustion engines to pollution-free vehicles.
- Now the EPA has the opportunity to both reinstate
- 6 and strengthen clean car standards. In addition to
- 7 fighting climate change, robust regulations would
- 8 protect communities from vehicle pollution and save
- 9 drivers money at the pump.
- This is especially critical because black and
- 11 brown communities and low-wealth communities experience
- disproportionate harm from dirty vehicle pollution.
- 13 This environmental injustice leads to increased rates
- of asthma and other respiratory illnesses.
- Once again, I urge this Administration to set the
- 16 strongest standards possible because they are practical
- and meet the moment that we're in. The EPA should
- 18 finalize standards at least as strong as Alternative 2
- 19 presented in the proposed rule. These standards can
- put us on the path to upholding our NBC of 50 to 52
- 21 percent net economy-wide greenhouse gas emission
- reductions below 2005 levels in 2030.

- Ultimately, these standards set for 2026 can lay
- 2 the groundwork for eliminating pollution from new
- yehicles by 2035. It is clear that we have no time to
- 4 waste.
- 5 Thank you for the opportunity to testify today.
- 6 MS. THOMPSON: Thank you for your comment.
- 7 The next speaker will be Steven Wyman. Steven, we
- 8 do not currently have you listed among the attendees.
- 9 However, if you have joined using a different name, we
- would ask that you raise your hand at this time.
- 11 (No response.)
- MS. THOMPSON: We will move on to the next
- 13 speaker.
- The next speaker will be Lisa Tanaka. You may now
- unmute and please state your name and affiliation for
- 16 the record.
- MS. TANAKA: Good afternoon. I am Lisa Tanaka.
- 18 I'm Assistant Deputy Executive Officer for Legislative
- 19 and Public Affairs at South Coast Air Quality
- 20 Management District. We are the local agency
- responsible for air quality in the Greater Los Angeles
- 22 Area.

- 1 Thank you for the opportunity to testify on the
- 2 proposed rule.
- 3 The 17 million residents in our jurisdiction
- 4 breathe some of the worst air in the U.S. Mobile
- 5 source emissions contribute to over 80 percent of the
- 6 smog-forming air pollution in our region.
- While heavy-duty trucks and other freight vehicles
- 8 are responsible for the bulk of these emissions,
- 9 emissions from light-duty vehicles are also
- 10 significant, and as EPA notes, light-duty vehicles
- 11 contribute substantially to greenhouse gas emissions.
- We applaud EPA's proposal to put the Clean Cars
- 13 Program back on track and reverse the 2020 standards
- 14 promulgated under the previous Administration. The
- 15 2020 standards created unnecessary delay in reducing
- 16 emissions from the light-duty sector.
- We urge EPA to move forward quickly to revise
- 18 these standards so that much-needed emissions
- 19 reductions can be realized as soon as possible.
- We believe that the standards EPA promulgated in
- 21 2012 were sound and well-supported, a conclusion EPA
- 22 confirmed in the 2016 mid-term evaluation.

- What was valid and feasible in 2012 is even more
- 2 achievable almost 10 years later after automotive
- 3 technologies have continued to advance and the public's
- 4 interest and appetite for zero emission vehicles has
- 5 increased.
- 6 To that end, EPA should finalize revised standards
- 7 that capture as much of the benefit of the 2012
- 8 standards as possible. We therefore urge EPA to
- 9 finalize Alternative 2 of the proposed revision.
- We further recommend that EPA finalize the Model
- 11 Year 2026 standards that is 10 grams per mile more
- 12 stringent than the current Alternative 2 target. This
- 13 combination would achieve emissions reductions that
- more closely approximate that which would have been
- achieved by the 2012 standards.
- Our agency is also fully supportive of policies to
- 17 covert the transportation sector to zero emissions,
- including light-duty vehicles. We recommend that EPA
- 19 reinstate multipliers for zero emission vehicles in the
- 20 final standard and set the cumulative credit cap at a
- level that ensures continued penetration of ZEVs in the
- 22 light-duty fleet.

- 1 Additionally, South Coast AQMD supports EPA's
- recognition in the proposed rule that a longer-term
- 3 rulemaking could also address criteria pollutant and
- 4 air toxic emissions in the new light-duty vehicle
- 5 fleet.
- 6 It goes on to state that a future longer-term
- rulemaking will take critical steps to continue the 7
- trajectory of transportation emissions reductions 8
- needed to protect public health and welfare, especially
- 10 important in our South Coast Air Basin where we are an
- 11 extreme non-attainment for ozone and PM 2.5.
- 12 South Coast AQMD strongly urges EPA not to delay
- 13 on a criteria pollutant and air toxic submission to
- 14 rulemaking for light-duty vehicles. Addressing air
- 15 pollutants and air toxic emissions should be considered
- 16 as soon as possible to reduce the impacts on public
- 17 health and assist with attainment of the Clean Air Act
- 18 standards.
- 19 In summary, we look forward to a final standard in
- 20 the near future that achieves the benefits that would
- 21 have been realized through the implementation of the
- 22 2012 standard and sends a strong signal for vehicle

- 1 electrification.
- 2 Thank you for this opportunity to testify and
- 3 we'll also be submitting more detailed written remarks.
- 4 MS. THOMPSON: Thank you for your comment.
- 5 The next speaker will be Anthony Witt. You may
- 6 now unmute and please state your name and affiliation
- ⁷ for the record.
- 8 MR. WITT: Yes. My name is Anthony Witt, and
- 9 while I'm testifying as a private citizen, I am a
- 10 retired city planner with expertise in environmental
- 11 planning, documentation, and regulations.
- 12 I fully support the strengthening of the clean
- 13 cars standards with the adoption of the EPA's second
- 14 alternative.
- The second alternative would deliver greater
- savings to consumers, an average of \$2,100 per vehicle,
- 17 and eliminate auto manufacturer loopholes.
- I have two sons and I'm extremely worried about
- the environment, public health, and the economy that
- we're leaving to future generations. Impacts of
- 21 climate change are already here.
- 22 My seven-year-old hybrid vehicle gets 40 miles to

- 1 the gallon. The relatively high fuel economy of my
- 2 hybrid saves money at the gas pump and I know that I'm
- 3 doing a small part to limit use of non-renewable
- 4 resources and reduce carbon emissions.
- 5 Auto manufacturers will not produce vehicles with
- 6 drastically higher fuel efficiency unless they're
- 7 required to do so. We need to set high standards and
- 8 eliminate loopholes that would prevent us from
- 9 achieving these goals.
- The Administration's "voluntary targets" and the
- 11 U.S. automakers "shared aspirations" are not
- 12 sufficient. To achieve the goal of reducing greenhouse
- 13 gas emissions from new faster vehicles sales by more
- than 60 percent, we need to set the strongest possible
- 15 standards for 2026.
- I urge the Administration to set the strongest
- standards possible because they're necessary and they
- work.
- 19 I urge you to reinstate the federal standards with
- your Alternative 2 and set even stronger ones through
- 21 2030.
- I ask you to ensure that there are no loopholes

- 1 for automakers to get around these standards.
- Thank you for the opportunity to testify.
- MS. THOMPSON: Thank you for your comment.
- 4 The next speaker will be Taisia Turza. You may
- 5 now unmute and please state your name and affiliation
- 6 for the record.
- 7 MS. TURZA: Hi. Thanks for letting me speak. Can
- 9 you hear me okay?
- 9 MS. THOMPSON: We can.
- MS. TURZA: Okay. Thanks.
- 11 My name is Taisia Turza, and I'm representing
- 12 myself, a steward of the earth, a Texas resident, a
- 13 former emergency medical technician, and a current
- 14 health care IT professional, passionate about
- addressing social determinants of health.
- 16 Thanks for giving me the opportunity to comment
- 17 today.
- I'm here because I'm deeply concerned about
- 19 emissions from all vehicle classes, namely, large
- vehicle classes, like trucks, SUVs, and ambulance vans.
- I grew up in Austin, Texas, and went to university
- in Houston, Texas, where I witnesses for myself the

- 1 impacts of air pollution in cities like Houston,
- 2 Galveston, Texas City, and all the neighboring towns.
- 3 Asthma and cancer rates in these areas due to
- 4 environmental pollutants, like GHG emissions, are
- 5 astronomical. Almost everyone knows somebody who has
- 6 had asthma or cancer or has it now.
- In my experience working as an EMT in the Houston
- 8 region, we would serve lower-income communities that
- 9 overwhelmingly suffered from chronic conditions that
- 10 are exacerbated by environmental factors like poor air
- 11 quality due to the vehicle emissions.
- 12 Transportation is the largest source of carbon
- emissions in the U.S. and it's critical that we both
- 14 make our gasoline-powered cars and trucks more
- 15 efficient and that shift rapidly to electric vehicles.
- 16 If the vehicles themselves had stricter emissions
- standards and thus lower emissions, then the health
- impacts on the community would be much lower, as well.
- 19 By implementing the strongest possible fuel
- 20 economy standards, the EPA would also be following
- 21 through on its stated commitment to environmental
- justice because issuing stronger clean car standards

- 1 will help address key transportation-related impacts,
- like social determinants of health, which impact low-
- wealth and black, Indigenous, people of color
- communities that experience disproportionate harm from
- 5 dirty vehicle pollution, leading to increased rates of
- 6 asthma and other respiratory illnesses and cancer.
- 7 That EPA must act to make clean car standards as
- strong and far-reaching as possible. It would be a win 8
- for the American people and all those looking to spur
- 10 job creation, economic growth, family cost savings, and
- 11 public health protection at the time when we need it
- 12 most.
- 13 I urge the EPA Administration to be leaders in
- 14 achieving a zero emissions future with strategic and
- 15 aggressive goals to help mitigate the impact of air
- 16 pollution on our health and therefore our livelihoods
- 17 and our future.
- 18 Thank you for your time.
- 19 Thank you for your comment. MS. THOMPSON:
- 20 As a reminder, if you are speaking today, you will
- 21 receive a notification on your screen that you are
- 22 being promoted to the role of panelist shortly prior to

- 1 your speaking time. You must accept that invitation to
- 2 be able to unmute when you are called to testify. This
- 3 will also allow you to turn on your camera which we
- 4 encourage you to do.
- 5 Speakers connected by telephone should unmute
- 6 their phones when called to testify.
- If you have joined using a name other than what is
- 8 listed on the speaker list or have dialed in, we ask
- 9 that you please raise your hand when called on so we
- 10 can promote you to the role of panelist. If you have
- 11 called in, you can raise your hand by dialing Star 9.
- 12 If you are having technical difficulties, please
- send an e-mail to public_hearing@abtassoc.com or call
- 14 919-294-7712. If you are not registered to speak but
- 15 you would like to, please send an e-mail to
- public_hearing@abtassoc.com or call 919-294-7712.
- 17 Speaker Block 4
- MS. THOMPSON: The next speaker will be Timothy
- 19 Minotas. You may now unmute and please state your name
- ²⁰ and affiliation for the record.
- MR. MINOTAS: Thank you.
- My name is Tim Minotas. I am the Legislative and

- 1 Political Coordinator for the Sierra Club Michigan
- 2 Chapter, also here as a private citizen.
- 3 Thank you to the EPA and the members of this panel
- 4 for giving me the opportunity to testify on such an
- 5 important topic.
- I'm here today because, unfortunately, the EPA's
- 7 proposed rule does not go far enough. It is far too
- 8 weak to achieve the climate progress we need. It
- 9 contains loopholes that allow auto manufacturers to
- 10 continue to double down on gas-powered vehicles and it
- does not position us to be the leaders moving into the
- 12 future.
- Right now in Michigan, nearly half of our
- 14 population, more than 4.7 million people, live in non-
- 15 attainment areas. Fossil fuel-powered vehicles emit
- 16 many criteria pollutants that directly impact human
- health, affecting some communities more than others.
- We know low-income and BIPOC communities face the
- worst air quality as a result of inequitable
- transportation systems.
- Implementing the strongest possible fuel economy
- 22 standards will not only show the EPA's commitment to

- 1 environmental justice but will also help address the
- 2 negative air-related health impacts to these
- 3 communities.
- 4 Also, Michigan is the birthplace of the automotive
- 5 industry. No other state currently produces more cars
- 6 and trucks than we do and while other countries are
- 7 moving forward with cleaner vehicles, our country has
- 8 remained idled.
- In order for Michigan and the United States to
- remain competitive and the leader, we must be bold with
- our action on clean car standards. Otherwise, we will
- 12 lose out on these 21st Century jobs. Enacting bold
- 13 standards will save consumers money, spur economic
- 14 growth, innovation, and job creation in the development
- and manufacturing of new clean car technologies and
- 16 electrified vehicles.
- With the IPCC Report and climate diseases we are
- 18 seeing and experiencing here today, both across the
- 19 United States and here in Michigan, we know that
- 20 climate change is here.
- Right now the transportation sector is the largest
- 22 emitter of greenhouse gases in the United States. We

- 1 cannot combat climate change without reducing and
- 2 eliminating tailpipe emissions. If the United States
- 3 is going to keep to its word to act aggressively on
- 4 climate, then we must rise to the moment that we are in
- 5 right now and enact the boldest and strongest possible
- 6 clean car standards.
- Once again, I thank you for the opportunity to
- 8 speak today and I urge the EPA to make clean car
- 9 standards as strong and as far-reaching as possible.
- 10 It would be a win for our climate, for jobs, the
- 11 economy, and families all across the country at a time
- 12 when we need it most.
- 13 Thank you.
- MS. THOMPSON: Thank you for your comment.
- The next speaker is Judi Egbert. You may now
- unmute and please state your name and affiliation for
- 17 the record.
- MS. EGBERT: Thank you for the opportunity to
- 19 testify.
- My name is Judi Egbert, Clayton, North Carolina.
- 21 I'm an active participant with the Unitarian
- Universalist Fellowship of Raleigh and a member of its

- 1 Environmental Justice Ministry.
- I support and appreciate President Biden's steps
- 3 toward renewing sensible standards for vehicle fuel
- 4 efficiency but am concerned that automakers will do as
- 5 they have repeatedly done before, that is, seek ways in
- 6 which they conduct and avoid improving fuel efficiency.
- Hence, I ask that the EPA choose Alternative
- 8 Number 2 which will more effectively and rapidly close
- 9 loopholes sought oftentimes by automakers and
- 10 Alternative 2 will enable significant savings for
- 11 consumers, perhaps as much as \$2,100 average per
- 12 vehicle.
- 13 Although I'm retired, I drive nearly 300 miles
- 14 each week to actively serve my community, planting,
- maintaining, and harvesting in organic gardens, helping
- build affordable housing, delivering meals to homebound
- elderly, closing the hunger gap in food deserts,
- 18 promoting voter engagement, providing encouragement and
- 19 support in a faith community, and demonstrating to our
- leaders how they can promote well-being to our
- 21 constituents.
- To perform these vital engagements on a somewhat

- 1 limited fixed income, I need and do use a fuel
- efficient vehicle, which is a hybrid Prius. I find
- 3 this vehicle, which gets about 45 to 50 miles per
- 4 gallon, can adequately and comfortably help me
- 5 contribute to a thriving community.
- 6 As an active citizen, I need a healthy
- 7 environment, one in which not only my car is fuel
- 8 efficient and low on emissions but also an environment
- 9 in which that is a standard. Hence, my expectation
- that the EPA will apply Alternative Number 2 for a more
- 11 effective, sensible, and healthy standard and vehicles
- 12 that are marketed in the U.S.
- 13 By having stronger standards, we not only save at
- 14 the gas pump but we save by having better air, land,
- and water quality and healthier citizens. 90 percent
- of American consumers favor more efficient and safer
- vehicle standards that reduce greenhouse gas emissions
- 18 and promote healthier communities.
- We don't need additional decades of research and
- development. We have the ability and technology to
- implement better standards now and Alternative Number 2
- 22 will enable that.

- 1 My thanks to the panelists who are taking the time
- 2 to listen and attend to our concerns. Thank you.
- MS. THOMPSON: Thank you for your comment.
- 4 The next speaker will be Jeffrey Gross. You may
- 5 now unmute and state your name and affiliation for the
- 6 record.
- 7 MR. GROSS: Hello. My name is Jeffrey Gross. I'm
- 8 a resident of Connecticut and a member of Sierra Club.
- 9 I grew up in the Northwest corner of Ohio in the
- 10 economic shadow of the giant automakers where one uncle
- worked at GM Research and to the west was South Bend,
- 12 Indiana, where the storied Studebaker company was
- 13 struggling through its final years but still supplying
- 14 cars to my family's Renault dealership.
- With that background, it took me a long time to
- 16 realize that our automobile culture was not in fact the
- 17 benevolent driver of the world economy and that its
- 18 paradigms were not the basis of the best of all
- 19 possible worlds.
- 20 My thinking was influenced over time by the
- 21 epochal policy shifts that grew in reaction to
- 22 awareness of a massive externality caused by

- 1 automobiles.
- The first shift was, of course, regulation of
- 3 automobile emissions in response to horrific air
- 4 quality problems. The second was the perceived threat
- 5 of peak oil which also introduced the economic
- 6 disincentive of higher fuel prices, and the third was
- 7 recognition that carbon from generations of oil
- 8 exploitation was causing disruption in the climate's
- 9 equilibrium.
- Now we all know these separate crises represent
- 11 essentially the same underlying problem, the systemic
- overuse of our natural resources, and it is significant
- that in each case our collective response was targeted
- 14 regulation but also reliance on market forces.
- 15 It is our misfortune, however, that these
- 16 responses were not enough and here we are today at an
- 17 EPA hearing all of us breathing air with more than 400
- parts per million of carbon dioxide, but this EPA
- decision needs to be part of this historical
- opportunity to bend the trajectory of dozens of
- 21 manufacturers and hundreds of millions of consumers to
- 22 a noble and necessary objective of net zero

- 1 transportation.
- 2 So I implore the EPA to have the vision to require
- 3 the maximum efficiency for the United States public,
- 4 which is to say, Alternative 2. The automobile
- 5 industry is supremely adept technically and oriented to
- 6 markets where similar higher requirements apply. I'm
- 7 confident they can adapt.
- 8 So I don't know which technology will win out in
- 9 the end, but let the EPA set high goals without
- 10 loopholes and let the manufacturers and consumers
- optimize the solutions.
- 12 I'm hopeful that a fleet composed of even
- currently shipping technologies evolving naturally
- under market pressure to mostly electric will achieve
- the numbers proposed and so set the stage for a net
- 16 zero future.
- 17 Thank you for the opportunity to speak.
- MS. THOMPSON: Thank you for your comment.
- The next speaker is Erandi Trevino. We do not
- 20 currently have you listed among the attendees.
- However, if you have joined using a different name, we
- invite you to raise your hand at this time and if you

- 1 have called in, you may raise your hand by dialing Star
- 2 9.
- 3 (No response.)
- 4 MS. THOMPSON: Similarly, we do not have the next
- 5 two speakers listed in the attendee list, JP Thomas and
- 6 Susie Robertson. However, if you have joined using a
- 7 different name, we would invite you to raise your hand
- 8 at this time.
- JP, I can see that you've raised your hand. So I
- will promote you to panelist.
- MR. THOMAS: Hello. Can you hear me?
- MS. THOMPSON: We can.
- ME. THOMAS: great. Good morning and thank you
- 14 for the opportunity to speak today.
- 15 My name is JP Thomas, and I'm the Director of
- 16 External Relations for Voice of the People, an
- organization that seeks to reanchor our democracy and
- its founding principles by giving We the People a
- 19 greater role in government.
- Today, I am going to present data from surveys
- 21 conducted by our partner, the Program for Public
- 22 Consultation at the University of Maryland School of

- 1 Public Policy, as well as from other respected polling
- organizations, on the public's view of air pollution
- 3 and fuel efficiency standards.
- 4 The Program for Public Consultation conducts
- 5 surveys of the American public on federal policy
- 6 proposals. Their surveys differ from standard polls in
- 7 that they provide respondents with a briefing on the
- 8 topic, details of the proposals, and arguments for and
- ⁹ against each proposal. This content is reviewed by
- 10 advocates and proponents to ensure it is accurate and
- 11 balanced.
- They use national probability-based samples
- provided by Neilson Scarborough with at least 2,400
- 14 registered American voters with a margin of error of
- 15 two percent.
- Overall, PPC finds that a large majority support
- the government taking action to reduce air pollution.
- 18 In a September 2020 survey, 78 percent of voters
- 19 assigned a very or somewhat high priority to the
- 20 government working to reduce air pollution that causes
- 21 negative health effects. This included 54 percent of
- 22 Republicans, eight in 10 Independents, and 98 percent

- 1 of Democrats.
- 2 A survey in 2016 on the clean power plans proposal
- 3 to require all cars and trucks by 2025 to emit half the
- 4 carbon dioxide of the 2010 model elicited support from
- 5 73 percent of voters, including 86 percent of
- 6 Democrats, 71 percent of Independents, and 57 percent
- ⁷ of Republicans.
- 8 They were informed that this proposal would
- 9 increase the cost of the vehicle but save consumers
- 10 more on gas in the long run.
- Similarly, increasing fuel efficiency standards
- 12 for heavy-duty trucks, vans, tractors, and similar
- vehicles was supported by 71 percent of American
- voters, including 84 percent of Democrats, 68 percent
- of Independents, and 56 percent of Republicans, though
- 16 they were told the proposal would increase the cost of
- the vehicle, again while saving money on gas in the
- long run.
- Both of these increases were supported also by
- 20 bipartisan majorities of voters in Texas, despite its
- 21 dependence on the oil industry.
- 22 After the Trump Administration replacement of the

- 1 clean power plan with the Affordable Clean Energy
- 2 Rules, which froze the fuel efficiency standards, a
- 3 survey by Yale University and George Mason University
- 4 asked respondents whether they would support the
- 5 government setting stronger fuel efficiency standards
- 6 for cars, trucks, and SUVs.
- 7 A large majority of 78 percent of voters were in
- 8 support, including 91 percent of Democrats, 76 percent
- 9 of Independents, and 62 percent of Republicans.
- In conclusion, increasing fuel efficiency
- 11 standards as a way to reduce air pollution is
- 12 consistently supported by a large majority of the
- 13 public, including majorities of Republicans, even after
- 14 being informed that it would raise the cost of
- 15 vehicles.
- 16 At Voice of the People we do not take a position
- on policy issues but believe that democracy is
- 18 important for government agencies to consult citizens
- on key policy issues that the government faces.
- We encourage you to take the views of all of the
- 21 public into account when deciding whether to change
- 22 federal fuel efficiency standards.

- 1 Thank you for the time today.
- MS. THOMPSON: Thank you for your comment.
- 3 Although we did not see a raised hand earlier, I
- 4 wanted to give Susie Robertson another opportunity to
- 5 raise their hand if they have arrived and are under a
- 6 different name.
- 7 (No response.)
- 8 MS. THOMPSON: Okay. The next speaker on our list
- 9 is Paul Osbourn. Paul, you may now unmute and please
- 10 state your name and affiliation for the record.
- MR. OSBOURN: My name is Paul Osbourn. I am
- 12 coming as a National Salesperson, not representing my
- company but someone that has spent 20 years in
- 14 commercial fleets and the last 10 selling alternative
- 15 fuel vehicles.
- While I believe the EPA plan has a noble intent, I
- 17 am concerned about the economic impact and it
- 18 potentially having a counterproductive result.
- We have seen trucks go from 2012 selling around
- \$25,000 to today at over \$45,000 and this current plan
- looks to drive things well north of 50. With the
- 22 addition of precious metals that will have to go into

- 1 the catalyst calibration time, we expect that.
- We're already seeing fleets in dealers around the
- 3 country placing record orders for Model Year '22. Some
- 4 manufacturers have already shut off the order window as
- 5 early as November, which normally would have stayed
- 6 open well into March or April of next year.
- 7 The reason they're doing it is to avoid what they
- 8 believe to be higher prices of the Model '23 and newer
- ⁹ vehicles.
- This also has a significant impact to the used
- 11 truck market. The people that fix your roof and paint
- 12 your house and deliver your Amazon packages and trim
- 13 your trees, these folks typically drive used vehicles
- 14 and those folks are also seeing particularly with the
- 15 chip shortage incredible rises in prices. What they
- typically end up doing is extending the life of their
- vehicle. They will often just buy a new engine or
- 18 rebuild the transmission and we get stuck with the same
- 19 emissions that we had that we're trying to replace.
- I believe the flaw in the plan does not have a
- 21 pragmatic path to cleaner emissions, and I believe that
- 22 if the EPA wants this to success they must partner with

- 1 Congress to offer greater tax incentives to buy these
- ² newer vehicles. In particular, those tax incentives
- 3 must include all cleaner fuels, including renewable
- 4 natural gas, renewable propane, as well as the hybrids
- 5 and the EVs that are out there.
- The new plan looks way too favorable towards one
- 7 technology that is not going to address all the needs
- 8 of all the fleets and that is my concern.
- I thank you for your time and thank you for the
- opportunity to testify.
- MS. THOMPSON: Thank you for your comment.
- The next speaker will be Ian Tafoya. You may now
- unmute and please state your name and affiliation for
- 14 the record.
- 15 As a reminder, you will need to accept the
- invitation to become a panelist.
- MR. TAFOYA: Hello. Can you hear me?
- MS. THOMPSON: We can.
- MR. TAFOYA: Hello. My name is Ian Thomas Tafoya,
- 20 and I am calling from Denver, Colorado. I am the State
- 21 Director for GreenLatinos for Colorado, a national
- 22 environmental justice and conservation movement,

- 1 bringing frontline activists to the front of the line
- 2 to fight for our environmental liberation.
- I am from a frontline community impacted by
- 4 highway pollution. I'm from a community that sued over
- 5 Title 6 for an expansion in my community, a Clean Air
- 6 Act lawsuit and NEPA, ultimately settling with the
- 7 government, and now PM 2.5 modeling is being questioned
- 8 in a whistleblower case of our entire Air Modeling
- 9 Division from the State of Colorado.
- 10 I'm from a community with bad water, one of the
- 11 most polluted zipcodes in America, and the home of the
- industrial sector of my city in a lot of ways, and I am
- 13 here today to ask you to go as strong as you possibly
- can, and I want to agree that I can hear what the
- person who testified before me said.
- We need downpayment since even beyond tax
- incentives for us to truly make this change.
- 18 I've been involved in transportation
- 19 electrification planning processes here at my Public
- Utilities Commission and through our conversations with
- 21 business owners and people that is what they want.
- But this is really about people. We can talk

- 1 about numbers all day, but saving people money, yes,
- also important, that's a co-benefit, but reducing the
- 3 amount of pollution into our community, reducing the
- 4 long-term impacts of carbon dioxide into our community,
- 5 and other VOCs is going to help, and what we've seen is
- 6 a direct connection between small particulate matter
- 7 and COVID deaths.
- 8 We've seen our communities drastically transformed
- 9 and asthma rates continue to climb. I'm here to ask
- 10 you to do the right thing.
- 11 The Environmental Protection Agency is about
- 12 protecting people, not businesses. We can't worry
- about people saying the entire system is going to
- 14 collapse because we do the right thing which is improve
- 15 the air.
- 16 Thank you very much.
- MS. THOMPSON: Thank you for your comment.
- 18 At this time, we will move on to the next speaker
- 19 block. All right.
- The next speaker listed is Terry McGuire. Terry,
- we do not currently see you among the list of
- 22 attendees. However, if you have joined under a

- different name, we invite you to raise your hand at
- this time, and if you have joined using your phone, we
- would ask that you dial Star 9.
- 4 (No response.)
- 5 MS. THOMPSON: Similarly, the next few speakers
- 6 are not appearing on my list of attendees. I'm going
- 7 to call their names and if you are here but are listed
- 8 under a different name, we would ask that you raise
- ⁹ your hand at this time. These names are Brian
- 10 Laughlin, Nick Trombetta, Emily Hopkins, and Valencia
- 11 Bednar.
- 12 (No response.)
- MS. THOMPSON: I do not currently see any hands
- 14 raised. So we will move on to the next speaker in the
- 15 list.
- The next speaker is Natalia Villalpando Paer. You
- may now unmute and please state your name and
- 18 affiliation for the record.
- 19 As a reminder, you will need to accept the
- invitation to be promoted to panelist in order for us
- 21 to hear you.
- (No response.)

- MS. THOMPSON: Natalia, I'm going to send one more
- invitation to be promoted to panelist. You may have
- 3 the ability at this time to hit the unmute button. We
- 4 wouldn't be able to see your camera but you can also
- 5 try that at this time.
- 6 (No response.)
- 7 MS. THOMPSON: Okay. I will provide a couple of
- 8 reminders.
- 9 So as a quick reminder, if you are speaking today,
- you will receive a notification on your screen that you
- 11 are being promoted to the role of panelist shortly
- 12 prior to your speaking time. You must accept that
- invitation to be able to unmute when you are called to
- 14 testify. This will also allow you to turn on your
- 15 camera which we encourage you to do.
- Speakers connected by telephone should unmute
- 17 their phones when called to testify.
- 18 If you are having technical difficulties, please
- send an e-mail to public_hearing@abtassoc.com or call
- 919-294-7712. If you are not registered to speak but
- you would like to, please send an e-mail with your name
- 22 and phone number to public_hearing@abtassoc.com or call

- 1 919-294-7712.
- If you are not registered to speak but would like
- 3 to, please send an e-mail with your name and phone
- 4 number to public_hearing@abtassoci.com or call 919-294-
- 5 7712.
- Finally, if you have joined using a name other
- 7 than one that's listed on the speaker list or have
- 8 dialed in, we ask that you please raise your hand when
- 9 called on so we can promote you to the role of
- 10 panelist.
- If you have called in, you can raise your hand by
- 12 dialing Star 9.
- Okay. Let me see a raised hand for a speaker from
- 14 Block 8. Erandi Trevino. Erandi, you should be
- 15 receiving an invitation to be promoted to panelist.
- When you are ready, you may unmute and please state
- your name and affiliation for the record.
- MS. TREVINO: Hi, good afternoon. My name's
- 19 Erandi Trevino. I am the Texas State Organizer for
- 20 Moms Clean Air Force.
- Thank you for listening to us today.
- Our membership is close to 67,000 here in the

- 1 state of Texas and our priority is, you know, fighting
- 2 for clean air for all, especially our children, and
- 3 regardless of racial background, financial background,
- 4 and because in places like Houston, we already have so
- 5 much exposure to toxins in the air from refineries,
- from the ship channel, and our city is growing every
- ⁷ single day, that means more cars because the only way
- 8 to get around in this city is by driving. There is no
- 9 effective public mode of transportation. There are
- 10 buses but in reality they take so long for people to
- 11 get around, you have to be able to have your own car.
- 12 As the previous speakers have noted, there is a
- big leap financial struggle that communities face in
- 14 buying an electric vehicle. So that the only way that
- we can reach a point where electric vehicles are such a
- big part of our transportation system is if the people
- 17 get help in order to make that initial payment.
- The other thing that I wanted to say is that one
- 19 of the reasons why this is so important is because
- again it's one easy solution that we have the
- 21 technology for. It's already out there. It's
- 22 something. It's sort of just low-hanging fruit at this

- 1 point because carbon emissions from vehicles, we accept
- 2 such a large portion of our air pollution, it's one of
- 3 the most important things that we can tackle at the
- 4 present moment.
- 5 So, please, I urge you to be as effective and as
- 6 aggressive in terms of funding for making it so that
- 7 people are even able to make that purchase because the
- 8 way that it is right now, people are struggling even to
- 9 buy cars at the lower end. They're becoming more
- 10 expensive every day.
- 11 I'm sure you have heard about the chip shortage
- that has caused vehicle shortages all over the country.
- 13 So vehicles are already becoming more and more
- 14 expensive and electric vehicles are even more expensive
- 15 than that.
- So in order for it to be a reality for people who
- 17 are not earning any additional money now that prices
- are going up, it would be really great to see a program
- that makes this a possibility for the communities that
- are impacted the most, the ones that are already at the
- 21 fenceline with these refineries and these other sources
- of carbon emissions.

- 1 Thank you for your time.
- MS. THOMPSON: Thank you for your comment.
- 3 The next speaker on our list is Richard Eckman.
- 4 Richard, we do not currently see you listed among the
- 5 list of attendees. However, if you have joined using a
- 6 different name, we would invite you to raise your hand
- 7 at this time.
- 8 (No response.)
- 9 MS. THOMPSON: All right.
- 10 Speaker Block 5
- MS. THOMPSON: We will move on to the next
- 12 speaker.
- 13 The next speaker will be Elizabeth Brandt.
- 14 Elizabeth, you may now unmute and please state your
- 15 name and affiliation for the record.
- MS. BRANDT: Hello. My name is Elizabeth Brandt.
- 17 I'm with Moms Clean Air Force. I'm Valencia and
- Natalia's mom, and I'm a Field and Special Projects
- 19 Manager for Moms Clean Air Force.
- When my kids and I talk about air pollution, they
- 21 identify vehicles as the biggest culprit. They are
- 22 right.

- 1 Pollution from the transportation sector is the
- 2 nation's leading source of climate warming carbon
- 3 pollution. Tackling pollution from cars and trucks is
- 4 one of the most important ways we can fight climate
- 5 change.
- 6 Please finalize the strongest possible national
- 7 greenhouse gas emission standards for passenger cars
- 8 and light trucks through Model Year 2026.
- 9 According to the recently-released IPCC Report,
- 10 climate change is accelerating. This historically hot
- 11 summer could be one of the coolest in the next decades.
- 12 As a parent, that's heartbreaking. On a recent
- 13 trip to my hometown in Washington State, I couldn't
- 14 help but notice all the ways the climate has changed
- the landscape in the last decade. The Glaciers on Mt.
- 16 Rainier have visibly diminished. Even from a hundred
- 17 miles away, the change is starkly apparent. The heat
- 18 wave shattered all temperature records at home. Farm
- 19 workers who endure hazardous emissions to harvest
- valuable fruit crops, pick cherries with hot lamps at 1
- in the morning to salvage the July cherry harvest.
- Low water levels and overly warm streams decimate

- 1 salmon runs which is bad news for anyone that likes
- fish, whether you're an Orca whale or a restaurant
- 3 patron.
- 4 Last August and September, the Pacific Northwest
- 5 was covered by an impenetrable lid of wildfire smoke.
- 6 I spent days looking for a way to help my sister Clare
- 7 who has asthma get to a place with clean outdoor air or
- 8 at least indoor air conditioning.
- The air quality map for Washington State was
- unrelentingly purple and red indicating extremely
- unhealthy levels of air pollution. The closest place
- with good air quality was in Wyoming. That's nearly a
- 13 thousand miles from Seattle.
- 14 The only feasible solution for Clare was staying
- in her home, taping shut the edges of her doors and
- windows, and eating only cold food as cooking can
- worsen indoor air quality in these conditions.
- 18 It's hot in her apartment and she had no way to
- 19 cool her home without letting in the filthy air. This
- is moving towards a new normal but it's not normal.
- 21 It's unacceptable for disproportionately=impacted
- 22 communities, for farm workers, for fishermen, and for

- 1 our kids who should be able to play outside without
- 2 having smoke sting their eyes.
- In order to prevent our worse case climate
- 4 scenario, we must take strong action now to reduce
- 5 pollution from cars. Climate change is disrupting our
- 6 livse. So we need to disrupt our approach to reducing
- 7 climate pollution. Bold action is needed.
- 8 The EPA must set the strongest possible federal
- 9 clean car standards through 2026, avoiding loopholes
- 10 and putting automakers on track to meet ambitious
- 11 pollution reduction goals.
- This proposal is a step toward a safer climate for
- 13 all of us. The EPA must set more ambitious clean car
- 14 standards for Model Year 2027 and beyond.
- 15 America's children are counting on us to solve the
- 16 climate crisis.
- 17 Thank you for the opportunity to testify.
- MS. THOMPSON: Thank you for your comment.
- The next speaker will be Melinda Fleming. You may
- 20 now unmute and state your name and affiliation for the
- 21 record.
- MS. FLEMING: Hello. My name is Melinda Fleming,

- 1 and I am an ordinary citizen speaking for myself, and I
- thank you for this opportunity to speak.
- I am a mother and a homemaker who likes to read 3
- and go for long walks and I fully support everything
- 5 the previous speaker has just said.
- 6 However, I also know that I am not speaking for
- 7 myself when I say that I am terrified. I'm terrified
- for my child, my family, my fellow citizens, and for 8
- our beautiful home planet earth.
- 10 I also know I'm not speaking only for myself when
- 11 I say that a lot of the science and statistics that are
- 12 being used to sound the alarm is mostly beyond me.
- 13 Yet, I believe these brave scientists because I and
- 14 many like me and like the previous speaker are right
- 15 now experiencing what they are talking about.
- 16 It is crystal clear that absolutely no one will
- 17 escape the consequences of a warming and polluted
- 18 atmosphere, not even people with spaceships.
- 19 However, I am extra terrified when I hear highly
- 20 experienced and qualified experts in science, policy,
- 21 and community activism talk about loopholes.
- 22 I'm terrified when I hear that even the strongest

- 1 formal measures, like Alternative 2, are not really
- 2 good enough. The reason this terrifies me the most is
- 3 simple. Even if you build a bridge almost all the way,
- 4 you might as well not have bothered because it simply
- 5 won't do the job it was intended to do.
- 6 We need to stop the atmosphere from heating up
- 7 further. The EPA's rule for clean vehicle standards
- 8 need to go all the way for us to cross the chasm of
- ⁹ global warming.
- Our margin for error has become so slim that we
- 11 cannot afford half measures of any kind. This is why I
- urge the EPA to propose and implement the strongest
- 13 rules possible to create the cleanest vehicles
- 14 possible.
- We have an extremely narrow window of opportunity
- left to us, to all of us. Let's not waste it.
- 17 Thank you.
- MS. THOMPSON: Thank you for your comment.
- 19 I would like to circle back to an earlier speaker,
- Natalia Villalpando Paer. We invite you to unmute at
- this time and please state your name and affiliation
- 22 for the record.

- 1 MS. VILLAPANDO: Thank you very much.
- 2 My name is Natalia Villalpando. I'm a volunteer
- 3 of Moms Clean Air Force.
- 4 Thank you for the opportunity to testify.
- I live in Washington, D.C. since January 2020.
- 6 I'm a mother of a wonderful 15-month-old boy and have
- 7 worked in public policy for the past nine years.
- I believe that the best way to create a safer and
- 9 more inclusive world for ourselves and our children is
- 10 through standards that allow us to live in the world as
- we imagine it, in a community as we envision it.
- Regulations should promote how we want to live and
- 13 what allows us to live better. Clean air standards
- 14 must ensure we live in the best and healthiest way
- possible.
- 16 That is why I support this Administration's
- proposal to strengthen federal clean greenhouse gas
- 18 emissions standards for passenger cars and light trucks
- 19 for Model Years 2023 and 2026.
- 20 My family and I are lucky to live near Rock Creek
- 21 Park, a 1,754-acre city park here in Washington, D.C.,
- 22 and we try to go out every day for a walk every day

- 1 with our son. However, last year, this summer, the
- temperature has been so high that we have been forced
- 3 to stay in for many days when the temperature rises.
- 4 The average high in July was 92.
- If this trend continues when my son turns seven he
- 6 probably that he will need to be stuck at home for 20
- 7 days or more because of high temperatures is very high.
- 8 This is just one personal and surely a very
- 9 privileged example of the danger of pollution and
- 10 climate change. People living in more vulnerable
- 11 communities face greater risks.
- The EPA has a responsibility to make sure we all
- 13 live in healthy communities. The EPA must set the
- 14 strongest possible federal clean car standards through
- 15 2026, avoiding loopholes and putting automakers on
- 16 track to meet ambitious pollution reduction goals.
- Making sure regulations for our cars are the best
- 18 for all of us is recognized and manufacturers have a
- 19 responsibility for the effects of the engines they
- 20 produce and the air we all breathe.
- Ultimately, if we don't protect the air we
- breathe, how can we be truthful about protecting any

- other thing? Present parents may agree with me when we
- ² first hear our babies take their first breath and cry
- 3 with all their voices. It's magic.
- 4 It is time to think of a future when children will
- 5 give that first breath into worst quality air because
- 6 we were not bold enough. We need to recognize that not
- 7 moving forward to fight climate change is already
- 8 creating inequalities, health problems, and a strain on
- 9 the health system for all of us.
- We need to do everything we can to ensure our
- 11 children can continue to play outside all summer and we
- 12 cannot address the climate crisis without moving
- 13 decisively to zero pollution vehicles. That is why I
- urge the EPA to set the strongest possible pollution
- 15 standards for cars.
- 16 Thank you for your time.
- MR. OLECHIW: Thank you for your son's comments,
- 18 also. We're going to record those as being in strong
- 19 support of our proposal. I think that's what we all
- 20 heard at the EPA. Thank you.
- MS. THOMPSON: Thank you for your comment.
- The next speakers on our list that I unfortunately

- 1 am not seeing on the attendee list are Dorothy Brandt
- and Peter Brandt. If either of you are here but are
- 3 maybe listed under a different name, we would invite
- 4 you to raise your hand at this time and we will promote
- 5 you to panelist, and I can see that -- it looks like
- 6 Dorothy Brandt has raised their hand. So I will
- 7 promote you now and when you are ready, you may unmute
- 8 and state your name and affiliation for the record.
- 9 MS. BRANDT: Hi. I'm Dorothy Brandt.
- Thank you so much for listening to my testimony
- 11 today.
- 12 I'm a retired Catholic School Principal and a
- 13 Volunteer with Moms Clean Air Force. I live in
- Washington, D.C.
- I call on the EPA to strengthen clean car
- 16 standards. One of my daughters has asthma and I insist
- that our government protect her and the health of all
- 18 Americans. No one should struggle to breathe due to
- 19 preventable car pollution.
- 20 My whole life experiences have shown me the need
- 21 for environmental regulation to protect our health. I
- 22 grew up in Los Angeles and lived with the worse air

- 1 quality. As a small child, we lived in East L.A. in
- 2 Compton in the polluted corner of the city. My nose
- 3 ran constantly as a reaction to the smog in our
- 4 neighborhood.
- A survey of L.A. residents in 1956 found that half
- of county residents wanted to leave L.A. because of
- 7 smog and people overwhelmingly felt that the smog was
- 8 bad for their health.
- 9 In the mid '50s my family moved further out to a
- 10 beach area where we could all breathe a little better.
- 11 As a small kid, we had no car but were able to travel
- 12 across L.A. on the Red Line, an early rail transit
- 13 system. Even with fewer cars in L.A., we still had
- 14 terrible smog from industries and trucks.
- 15 As a college student in the 1960s, I had to drive
- into downtown L.A. to use the Municipal Library. Smog
- was so thick that it made driving unsafe. At this
- 18 point L.A. and the State of California were making
- 19 efforts to curb smog pollution but it was not enough to
- 20 protect our health.
- 21 As a teacher in the late 1960s I had students
- whose families had to relocate to the ocean area to

- 1 help their child breathe. I began to have more
- 2 asthmatic students to watch out for in the classroom.
- In 1969, my husband and I moved to Seattle,
- 4 Washington, where for the first time in my life at age
- 5 24 I could breathe easily.
- I tell you my story so you'll understand the
- 7 personal experiences of people living with poor quality
- 8 air. Do not forget this past. We all know pollution
- 9 from cars causes breathing problems. California's air
- is so much better today than it was in the past because
- the government recognized the auto emissions problem
- 12 and worked to improve clean air.
- California is still leading the way to limit
- 14 dangerous auto emissions. Federal leadership is
- 15 needed. Please help us by minimizing dangerous
- 16 greenhouse gas emissions for passenger cars and light
- 17 trucks for the Model Years 2023 through 2026.
- This is a necessary short-term first step in
- 19 addressing climate pollution from the transportation
- 20 sector. If we do, our future could be much brighter
- with cleaner air to breathe and to my knowledge smog
- 22 pollution is getting worse in America.

- 1 This is because of climate change and auto
- 2 emissions. We are already experiencing rising
- 3 temperatures and more intense heat waves because of
- 4 climate change. High heat creates the perfect
- 5 conditions for ozone to form.
- 6 As climate change continues to erode the progress
- 7 we've made on cleaning up air pollution, we need strong
- 8 standards to follow the science and protect our health.
- Please hear my urgent plea to create the strongest
- 10 possible federal clean air standards to protect us as
- 11 Americans who are hit hard by climate change and
- 12 breathing polluted air.
- 13 As a mom, grandmother, teacher, and principal, I
- 14 highly recommend that the EPA work to strengthen these
- 15 standards to ensure that our most precious national
- treasure, our children, are given the best air we can
- 17 give them. This is our responsibility. Our country's
- 18 future depends on it and as a Roman Catholic my sense
- of morality dictates it. I urge the EPA leadership to
- 20 fight to protect life and health for each American
- 21 child.
- Thank you so much for listening to my testimony

- 1 today. It means a great deal to me.
- MS. THOMPSON: Thank you for your comment.
- 3 The next speaker will be Valencia Bednar. You may
- 4 now unmute and please state your name and affiliation
- 5 for the record.
- 6 MS. BEDNAR: Hi. My name is Valenzia Bednar, and
- 7 I am eight years old. I'm from Seattle, Washington. I
- 8 moved across the United States to Maryland.
- I am wanting today to have a healthy climate and
- 10 not have pollution from cars. I am worried about
- 11 skiing because I really like to ski. Because we have a
- 12 lot of climate change, I may never be able to ski.
- 13 Also, climate change is a problem with Maryland in
- 14 the summer. It can be really hot. We can't play as
- well when it's too hot. We have really strong rain
- 16 storms and climate change makes rain storms worse. It
- 17 rained hard seven days in a row recently. When it
- 18 rains like that, the pool closes and we can't play
- 19 outside.
- We live close to busy roads and car pollution
- isn't good for us. We are trying to do our part. We
- 22 want to ride our bikes but cars make it harder. Cars

- 1 create a lot of pollution and are a big part of the
- 2 climate change problem.
- We need EPA to help cars pollute less. I need
- 4 cars to become cheaper so my family can get one.
- 5 Please tell President Biden hi for me.
- 6 Thank you.
- 7 MS. THOMPSON: Thank you for your comment.
- The next speaker will be Peter Brandt. Peter, you
- 9 may now unmute and please state your name and
- 10 affiliation for the record.
- MR. BRANDT: Hi there. My name is Peter Brandt.
- 12 Thanks for the opportunity to speak today. I'm a
- 13 Volunteer with Moms Clean Air Force. I am from Tacoma,
- Washington, currently a bit of a COVID nomad living in
- 15 British Columbia, Canada.
- I'm a lawyer. I've taught law school classes on
- animal law and I've written on the history of animal
- 18 law and environmental law in the United States, and
- there are a lot of reasons I support EPA's proposal
- here. I'll try not to duplicate what other people have
- 21 said, but obviously I have to start with the fires.
- I grew up here in the Northwest. I've seen dozens

- of summers in the Northwest and I've seen them get
- 2 hotter. I've had to get used to seeing people walk the
- 3 streets of Portland Seattle in gas mask-like filters
- 4 because of wildfires.
- 5 As of earlier this week in British Columbia, there
- 6 are 246 active wildfires and 23 of these are wildfires
- of note and this is an improvement over the last week.
- 8 So obviously global warming doesn't care about
- 9 national borders. I think we're all aware that the
- 10 same fires that are burning up here and destroying our
- 11 quality have also been devastating Washington, Oregon,
- 12 and, you know, destroying forests, destroying critical
- 13 habitat for endangered species, and for all wildlife,
- 14 and making life miserable for people.
- So as a lawyer and a teacher, I've studied how
- 16 powerful industries tend to react whenever enhanced
- public health and safety regulations are proposed.
- 18 There's a lot to learn from that history.
- The main lesson I take away from it is no matter
- what the new protection might be, the sky is always
- 21 falling according to the regulated industry.
- Many of the protective laws we take for granted

- 1 now were foretold by the meat industry as the death
- 2 knell for their entire enterprise.
- 3 The first U.S. animal welfare law had to do with
- 4 animals on trains and it just required after a little
- 5 over 24 hours you have to let those animals out so they
- 6 can drink and rest and have some food. This is the
- late 19th Century/early 20th Century. 7
- 8 What did the railroad barons say? This was going
- to crush them. They just could not survive this.
- 10 think we are all pretty aware no one had more power and
- 11 resources in that time frame than the railroads.
- 12 What happened? They complied and the sky didn't
- 13 fall and the law was motivated to protect animals but
- 14 Congress made clear it understood the threat to human
- 15 health, like it is dangerous to eat the meat of an
- 16 animal that's extremely sick from transport.
- 17 The Humane Methods of Slaughter Act, the law that
- 18 says you can't kill a cow by hitting it in the head
- 19 with a sledgehammer. In 1950s, when the law was first
- 20 enacted, it only applied to sales to the U.S.
- 21 Government.
- 22 What did the industry say? Sky was falling. Even

- 1 the Secretary of USDA told Congress not to enact it.
- 2 Obviously the sky didn't fall. Things got better.
- 3 Things got safer.
- 4 So it's just easy for trade groups to paint every
- 5 new incremental protection as the death knell for their
- 6 industry but it's almost universally overblown. I grew
- 7 up with no airbags in cars. It was only required in
- 8 the late 1990s and that was after decades of auto
- 9 industry opposition and delay and that's fine. There
- 10 are people that get paid a lot of money in Washington,
- 11 D.C., to delay any new regulation.
- But it's up to regulators to be very skeptical
- when an industry is doing the Chicken Little routine
- 14 about common sense protections for public health and
- safety and like the 28-hour law that protected farm
- animals in transportation, there are side benefits, and
- 17 I think EPA recognizes this itself.
- 18 It's going to save American drivers between 120 to
- 19 250 billion in fuel costs to go through with the
- 20 proposed enhanced emissions standards for passenger
- 21 cars and light trucks.
- So I'm very heartened that the agency is

- 1 considering this and I would urge you to not water
- things down in response to industry opposition.
- 3 Thanks very much.
- 4 MS. THOMPSON: Thank you for your comment.
- 5 As a reminder, if you are speaking today, you will
- 6 receive a notification on your screen that you are
- ⁷ being promoted to the role of panelist shortly prior to
- 8 your speaking time. You must accept that invitation to
- 9 be able to unmute when you are called to testify. This
- will also allow you to turn on your camera which we
- 11 encourage you to do.
- 12 Speakers connected by telephone should unmute
- their phones when called to testify.
- 14 If you have joined using a name other than what is
- listed on the speaker list or have dialed in, we ask
- 16 that you please raise your hand when called on so we
- can promote you to the role of panelist. If you have
- dialed in, you can raise your hand by dialing Star 9.
- 19 If you are having technical difficulties, please
- send an e-mail to public_hearing@abtassoc.com or call
- 919-294-7712. If you are not registered to speak but
- you would like to, please send an e-mail with your name

- 1 and phone number to public_hearing@abtassoc.con or call
- 2 919-294-7712.
- 3 The next speaker will be Nick Trombetta. As a
- 4 reminder, you will need to accept the invitation to
- become a panelist and when you are ready you may unmute
- 6 and state your name and affiliation for the record.
- 7 MR. TRUMBETTA: Hello. Can you hear me?
- MS. THOMPSON: We can.
- 9 MR. TROMBETTA: Hello. I am Nick Trombetta with
- 10 the League of Conservation Voters.
- I just wanted to thank you for having me speak and
- 12 I'll get going.
- So as I said before, I'm a Field Organizer. I
- wanted to voice my support for reinstating and
- 15 strengthening the clean car standards that were rolled
- 16 back by the Trump Administration.
- President Biden has taken a strong stance on
- climate with promises of 100 percent carbon-free
- 19 electricity industry by 2035, a major promise.
- In light of the recent report from IPCC, it is
- 21 clear more than ever that climate change poses a
- 22 significant threat to human existence on earth and must

- 1 be addressed in the strongest way possible.
- This means that the EPA must take a strong stance
- on climate change, and clean cars standards is a great
- 4 way to start. This will send a message to the rest of
- 5 the world that America is ready to be a climate leader.
- 6 Furthermore, clean cars standards are a win for
- 7 everyone, consumers, car manufacturers, and the
- 8 environment. It will allow customers to more easily
- 9 afford fuel efficient vehicles which are frequently
- 10 more expensive than gas-guzzling alternatives.
- This will also spur greater innovation and guide
- 12 car manufacturers in the correct direction, making it
- 13 most profitable to invest in electric and hybrid
- 14 vehicles instead of archaic cars and SUVs with poor gas
- 15 mileage.
- 16 Essentially, we will be saving the car
- 17 manufacturers from themselves and promoting their best
- 18 interests down the line.
- 19 Cleaner car standards are a true win for all
- 20 parties. It will be a positive for long-term profits
- of car manufacturers, a strong step towards addressing
- 22 climate change, importantly protect vulnerable

- 1 communities. This will be important in terms of
- 2 environmental justice of low-income and minority
- 3 communities who suffer the most from excess air
- 4 pollution who are generally positioned closest to
- 5 highways leading to increased rates of asthma and
- 6 respiratory disease.
- 7 This is an important issue in North Carolina,
- 8 particularly where I live in Chapel Hill. The
- 9 University of North Carolina where I went to school
- operates a coal-powered plant right by Northside, a
- 11 predominantly African American community.
- 12 The other day, an activist was telling me about a
- 13 factory that operated near the HBCU she went to for
- 14 college and how the foul smell reached her every time
- the wind blew in her direction.
- 16 Environmental racism is persistent in North
- 17 Carolina and clean cars standards can at the very least
- serve as a step towards righting these historic wrongs.
- 19 In conclusion, strengthening clean car standards
- are a win for all parties involved, not just the
- 21 environment and not just for consumers. It's clearly
- in the best long-term interests of car manufacturers,

- 1 the planet, and vulnerable communities. It is past
- 2 time that the United States takes a strong stance on
- 3 climate change.
- 4 We must take the recent IPCC Report seriously and
- 5 enact the strongest possible regulation on car
- 6 emissions.
- 7 Thank you very much for your time.
- MS. THOMPSON: Thank you for your comment.
- The next speaker will be Vinh Dang. You may now
- unmute and please state your name and affiliation for
- 11 the record.
- MR. DANG: Hi. I'd like to thank the EPA and all
- 13 hear for the opportunity to testify.
- I want to thank the speakers before me as well as
- the organizers for their amazing work to protect our
- 16 planet.
- 17 My name is Vinh Dang, and I'm here as a private
- 18 citizen who serves on the Board of Directors of Bridge
- 19 Beyond, a 501(c)(3) nonprofit organization that is
- dedicated to bridging resources to and supporting those
- 21 experiencing homelessness.
- On a daily basis, we support homeless people and

- meet with them to learn about their struggles and how 1
- we can support them with our resources. The stories
- that I've heard from those experiencing homelessness
- 4 are shocking which is why I'm here today to reshare
- 5 their stories since they cannot be here to do so.
- 6 Homeless individuals are on the front lines of
- 7 ongoing climate crisis and are repeatedly exposed to
- toxic air pollution. The homeless community members 8
- that we work with in Philadelphia have been diagnosed
- 10 with pollution-induced asthma from panhandling along
- busy roads and intersections where toxic pollution is 11
- 12 spewing into their communities.
- 13 While they panhandle for hours outside, they're
- 14 slowly being killed from the vehicle pollutants from
- 15 vehicles owned by the very individuals they're trying
- 16 to earn a dollar or two from to feed themselves.
- 17 Temperatures in Pennsylvania have increased 1.8
- 18 degrees Fahrenheit in the last century and it's
- 19 projected to warm another 5.9 degrees by mid-century.
- 20 This rise in temperature and the growing persistence of
- 21 heat waves have also threatened the lives of our
- 22 homeless individuals in Philadelphia.

- 1 The homeless individuals that I've met with and
- 2 supported on the ground have mentioned how they're
- 3 suffering not just from pollution-induced respiratory
- 4 diseases but how rising temperatures have caused them
- 5 heat exhaustion, heat strokes, and immense fatigue to
- 6 the point of delirium.
- We need to take strong action to help everyone in
- 8 this country, including the homeless, and I urge this
- 9 Administration and the EPA to set the strongest
- standards possible, one that is stronger than the
- original Obama clean car standards.
- On behalf of Bridge Beyond, I thank you for the
- opportunity to testify.
- MS. THOMPSON: Thank you for your comment.
- The next speaker will be Terry McQuire. As a
- 16 reminder, you will need to accept the invitation to
- 17 become a panelist for us to be able to hear you today.
- When you are ready, please unmute and state your name
- 19 and affiliation for the record.
- MR. McQUIRE: Hello. My name is Terry McQuire. I
- work for Earth Justice as a Clean Air Advocate, but I'm
- 22 speaking today in my personal capacity as a resident of

- 1 Old Southwest, a neighborhood in Roanoke, Virginia.
- Old Southwest, like many neighborhoods in Roanoke
- 3 and other cities and communities across the country, is
- 4 directly adjacent to a major roadway, in our case
- 5 Interstate 581 which overlaps with Route 220. This
- 6 highway has been marked as a future corridor for
- 7 Interstate 73, a planned highway that would run through
- 8 Virginia, North Carolina, and West Virginia, and a
- 9 project that myself and many other neighbors are
- vehemently opposed to.
- 11 My neighbors and I are opposed to construction of
- 12 Interstate 73 for the same reason that I urge you to
- 13 move as quickly as possible to finalize the strongest
- 14 possible cleaner car standards.
- Our communities can't take any more air pollution
- 16 and we need EPA to act. Cleaner car standards that
- move us closer to zero emissions vehicles will have the
- 18 added benefit of reducing other dangerous air
- 19 pollutants.
- 20 My house is less than two blocks from Interstate
- 581. Studies make very clear that communities near
- 22 major roadways are exposed to higher levels of

- dangerous air pollution. We know that this is true in
- 2 my house because every six months or so we have to wash
- 3 the front of the house off that's not covered by the
- 4 porch roof. A layer of black soot builds up on the
- 5 exterior of our home wherever the rain cannot reach it
- 6 to be washed away.
- 7 In more moderate months when we leave our windows
- 8 open to get fresh air and avoid having to run the air
- 9 conditioning, a layer of soot also develops on the
- window sills. So I know that we're breathing that in.
- 11 As a clean air advocate, I know how dangerous soot
- 12 pollution is, especially for sensitive populations,
- 13 like children and seniors. Directly across the street
- 14 from my house is a small park, Argonne Circle, where
- groups of children play whenever the weather permits.
- I think about the pollution they are breathing and
- wonder if this will result in avoidable sickness or
- 18 health harms.
- 19 Also across from the park is a senior
- 20 rehabilitation and hospice center. I also think about
- those elderly residents and I wonder if our proximity
- to Intestate 581 shortens what little time they may

- 1 have left with their loved ones.
- I appreciate the work that you're doing and I'm
- 3 here today in my personal capacity as a resident of
- 4 this highway-adjacent neighborhood to ask that EPA as
- 5 quickly as possible move forward with cleaner car
- 6 standards that bring us closer to zero emission
- 7 vehicles that have zero greenhouse gas emissions as
- 8 well as other dangerous air pollutants that we know
- 9 harm our communities.
- 10 Thank you.
- MS. THOMPSON: Thank you for your comment.
- 12 The next speaker will be Columba Sainz. You may
- 13 now unmute and please state your name and affiliation
- 14 for the record.
- MS. SAINZ: Hi, hello. My name is Columba Sainz.
- 16 I'm the State Organizer with Moms Clean Air Force.
- 17 Can you hear me?
- MS. THOMPSON: We can.
- MS. SAINZ: Here in Arizona, we have more than
- 90,000 members who are speaking up for our right to
- 21 have clean air and a healthy climate. We are educating
- ourselves about how air quality impacts our health of

- 1 our families and we are fighting pollution and air
- ² quality together.
- I'm here because after moving to a highly-polluted
- 4 area, my daughter starting wheezing at night after
- 5 moving to a house where we hoped to put down roots and
- 6 stay in a new home in South Phoenix.
- My daughter never presented with respiratory
- 8 problems until we moved to this neighborhood. When we
- 9 took her to the doctor, the pediatrician prescribed her
- 10 asthma medicine and an inhaler and I couldn't stop to
- 11 ask why. Two months spent in the park obviously made
- 12 an impact on my daughter's little lungs just for
- spending just a couple hours at the park and I come
- 14 from a very athletic family.
- 15 I grew up with the mentality that exercising was
- 16 good for our body and our mind, especially when you
- 17 have the opportunity to do it outdoors and connect with
- nature, and that is what I wanted for my family.
- And this is why I support this Administration's
- 20 proposal. It is a step in the right direction to
- 21 address the climate emergency. Pollution from cars not
- only causes climate change, it harms my family's health

- 1 and my community's. It threatens our health without
- 2 mentioning families with no insurance, undocumented
- 3 immigrants with no health access, low-wealth, and BIPOC
- 4 communities experience disproportionate harm from dirty
- 5 vehicle pollution, living through racial disparities in
- 6 rates of asthma and other respiratory illnesses.
- 7 President Biden has promised to address climate
- 8 change and fight for environmental justice and EPA
- 9 should finalize the strongest possible option and put
- 10 America's families and health first.
- 11 Thank you very much for the opportunity to speak.
- MS. THOMPSON: Thank you for your comment.
- The next speaker is Eduardo Sainz. We do not
- 14 currently have you listed among the list of attendees.
- 15 However, if you have joined using a different name, we
- would ask that you raise your hand at this time. If
- 17 you called in, you can raise your hand by dialing Star
- 18 9 on your phone.
- 19 (No response.)
- MS. THOMPSON: Okay. We will move to the next
- 21 speaker. The next speaker will be Alice Henderson.
- 22 Alice, you may unmute and please state your name and

- 1 affiliation for the record.
- MS. HENDERSON: Hi. My name is Alice Henderson.
- 3 I'm speaking for the Environmental Defense Fund.
- 4 Thank you for the opportunity to testify today.
- 5 EDF supports EPA's proposal to strengthen the
- 6 clean car standards that were weakened by the previous
- ⁷ Administration.
- 8 I'd like to focus my comments today on the urgency
- 9 in finalizing this rulemaking and in swiftly setting
- 10 standards beyond Model Year 2026 that will enable us to
- 11 achieve our longer-term climate goals and eliminate the
- 12 harmful air pollution from vehicles that
- disproportionately impacts low-income communities and
- 14 communities of color.
- We encourage EPA to finalize this rule promptly to
- 16 ensure that these more protective standards will apply
- 17 to Model Year 2023 vehicles, securing vital near-term
- emissions reductions. EPA has reasonably determined
- 19 that these Model Year 2023 reductions are feasible.
- In this month's proposal, EPA has indicated that a
- 21 future longer-term program for Model Year 2027 and
- 22 later will build upon these near-term standards and EPA

- 1 has recognized that the shift to zero emission
- 2 technologies that we're already seeing today presents
- 3 an opportunity for dramatic reductions both in
- 4 greenhouse and criteria pollutant emissions over the
- 5 longer-term.
- 6 EDF shares this vision and we urge EPA to adopt
- 7 protective multi-pollutant emission standards to seize
- 8 this moment and put the country back on track to reach
- 9 50 percent sales of new zero-emitting passenger cars
- and light trucks by 2030 consistent with President
- 11 Biden's Executive Order earlier this month and to put
- the country firmly on the path to eliminating tailpipe
- 13 pollution from new passenger vehicles by 2035.
- 14 Standards at this level are consistent with major
- 15 automaker commitments to a zero emission future and to
- the over \$100 billion that companies like Ford, GM, and
- 17 Stanlitis are investing to make that future a reality.
- We need American leadership of the scope and
- ambition that wlll ensure our domestic auto industry
- 20 and American autoworkers can be at the forefront of the
- 21 transition to zero-emitting vehicles and won't be left
- 22 behind.

- 1 Standards that eliminate tailpipe pollution from
- 2 new passenger cars and trucks by 2035 could reduce more
- 3 than 11 billion tons of climate pollution by 2050,
- 4 prevent nearly 100,000 premature deaths, and save
- 5 consumers over \$5,000 over the life of a vehicle, all
- 6 while growing domestic well-paying jobs.
- 7 The powerful personal stories that stakeholders
- 8 have shared over the last two days have really thrown
- 9 into stark relief the climate and public health stakes.
- 10 We urge EPA to act swiftly in the race to prevent the
- worst times of climate change and to bring some relief
- to the frontline communities overburdened by vehicle
- 13 pollution.
- 14 Thank you.
- MS. THOMPSON: Thank you for your comment.
- The next speaker is Madeline Oliver. Madeline, we
- do not currently have you listed in the attendee list.
- 18 However, if you have joined using a different name, we
- 19 would ask that you raise your hand at this time.
- 20 (No response.)
- MS. THOMPSON: The next speaker is Justin Mog. We
- do not have you listed among the list of attendees at

- 1 However, if you have joined using a this time.
- different name, we would encourage you to raise your
- 3 hand at this time.
- 4 (No response.)
- 5 Okay. We will move on to the next MS. THOMPSON:
- 6 speaker.
- 7 The next speaker will be Marc Drehsen. Marc, you
- 8 should have the ability to unmute on your hone and when
- you are ready, please state your name and affiliation
- 10 for the record.
- 11 (No response.)
- 12 MS. THOMPSON: As a reminder, you will need to
- 13 unmute on your phone in order for us to hear you.
- 14 (No response.)
- 15 MS. THOMPSON: It seems that there may be some
- 16 technical difficulties. I would encourage you to reach
- 17 out to public_hearing@abtassoc.com or call 919-294-
- 18 7712.
- 19 We will move on to the next speaker. However, I
- 20 will circle back to see if we can get you unmuted so
- 21 you can give your testimony.
- 22 The next speaker will be Michael Petelle.

- 1 Michael, when you are ready, you are welcome to unmute
- 2 and please state your name and affiliation for the
- 3 record.
- 4 MR. PETELLE: I am Michael Petelle, a retired
- 5 teacher from Marietta, Georgia, and Member of the Union
- 6 of Concerned Scientists.
- 7 Thank you for giving us the opportunity to speak.
- 8 I live in a state that has not chosen to enact
- 9 tougher standards than the federal standards and is
- unlikely to do so in the near future. Therefore, it is
- important to me that the federal standards are as
- 12 stringent as possible.
- 13 I'm glad to see that you have chosen to undo the
- 14 Trump Administration's rollback of the clean car
- standards for vehicles made from 2021 to 2026.
- 16 However, given the scale of the climate crisis,
- the new standards should be much stronger. They should
- 18 be at least as strong as the standards that were
- 19 finalized under President Obama.
- Unfortunately, the proposed standards are full of
- loopholes that will allow automakers to not make the
- 22 most efficient cars they can and will also slow the

- 1 transition to electric vehicles.
- I strongly urge you to adopt the most stringent
- 3 alternative put forward in the rule and reduce the
- 4 flexibilities that are given to the automakers to
- 5 ensure that they make and market more electric vehicles
- 6 and gasoline-powered vehicles that are much more
- ⁷ efficient.
- I have been driving efficient hybrids for 20 years
- 9 now and I know firsthand that the auto industry can
- 10 make clean, efficient cars. They have had many years
- of experience to make them even better.
- I bought a new 2001 Prius and owned it until 2016
- when I gave it to a niece, replacing it with a Chevy
- 14 Volt. My wife bought a new Prius in 2005. All three
- 15 cars have been very efficient, clean, quiet, reliable,
- and amazingly peppy.
- Unfortunately, because my wife owns and trailers
- 18 horses, we also own a pickup truck that gets horrible
- 19 gas mileage and is loud and smelly. So while
- 20 automakers can make clean efficient vehicles, they
- often do not do so.
- The automakers need the incentives to continue

- 1 making and improving upon hybrids, plug-in hybrids, and
- 2 all-electric vehicles. They need to be steered in the
- 3 direction of replacing their highly-inefficient
- 4 vehicles with cleaner, more efficient vehicles.
- 5 Strong emissions standards provide an incentive
- 6 for them to do a better job.
- Finally, note that these meetings are being held
- 8 virtually because we are in the midst of a pandemic.
- 9 One thing we have learned is that air pollution is
- 10 known to exacerbate the effects of COVID. Clearly now
- is the time to make our air quality better through
- 12 stronger emissions standards for vehicles.
- 13 Please choose to enact the most stringent
- 14 standards possible.
- 15 Thank you.
- MS. THOMPSON: Thank you for your comment.
- 17 The next speaker will be Robin Hankins. You may
- 18 now unmute and please state your name and affiliation
- 19 for the record.
- MS. HANKINS: Hello. Thank you.
- 21 My name is Robin Hankins. I'm an engineering
- 22 geologist and a member of the Union of Concerned

- 1 Scientists and I'm currently employed by the California
- 2 State Water Resources Control Board, but I'm here today
- 3 as a private citizen expressing my personal concerns.
- 4 Let me start by saying that I'm very, very
- 5 heartened to see that this Administration is
- 6 considering to revise the previous rollback of the
- 7 vehicle standards for cars and light trucks made in
- 8 2023 onward. Given the alarming scale of the climate
- 9 crisis, the previous standards just aren't enough.
- We're currently experiencing a record number of
- 11 climate-induced natural disasters across the U.S.
- Wildfires, hurricanes, flooding, drought, snowstorms in
- many places that had never experienced them before.
- 14 The costs of such disasters are astronomical. To
- paraphrase a recent report by NOAA, during the first
- half of 2021 alone, there have been eight separate
- 17 billion dollar climate disaster events across the U.S.
- 18 Last year, there were 22. If we do nothing about this
- 19 crisis now, it will only get worse.
- 20 Greenhouse gas emissions standards are directly
- 21 tied to the severity of the climate crisis. Lowering
- our emissions is vital to getting climate change under

- 1 control and preventing these disasters. Therefore,
- 2 these standards should be at least as stringent as
- 3 those that were finalized under the Obama-era
- 4 Administration, if not more.
- 5 Unfortunately, as my colleague pointed out, the
- 6 current proposal seems to be full of loopholes that
- 7 will allow automakers to avoid making more efficient
- 8 cars and slow the critical transition to electric
- ⁹ vehicles.
- We don't have time for a slow comfortable
- 11 transition from gas to electric. The Intergovernmental
- 12 Panel on Climate Change Report shows that without
- extreme cuts to global emissions, the earth could warm
- 14 by as much as four degrees Celsius within the next two
- 15 decades. This is happening now.
- Within my short lifetime, I have personally
- witnessed the increase in temperature, increase in
- unpredictability and severity of weather, the
- 19 destruction of farmland due to drought, and more.
- I am here today because if nothing drastic is done
- to halt climate change and done quickly, I'm afraid
- that I will never be able to buy a home that is safe

- 1 from fire or flooding. I could lose access to clean
- 2 drinking water, that I won't have food security, that
- 3 damaged infrastructure could strand me without
- 4 electricity for weeks or months.
- I could lose everything. So many people have
- 6 already lost everything. The climate crisis is not a
- 7 problem for the future. It is a problem now and we
- 8 must take action now to stop it before its effects are
- ⁹ irreversible. We simply do not have the luxury of
- 10 time.
- So I strongly, strongly urge you to adopt the more
- 12 stringent alternative put forward in the revised rule,
- implement the full 10 percent stringency or greater on
- 14 emissions, and reduce the flexibilities given to
- 15 automakers to ensure that they produce and market the
- 16 most efficient gasoline-powered vehicles possible or
- switch to electric entirely. My future, our future is
- 18 at stake here.
- 19 Thank you for giving me the chance to testify
- today.
- MS. THOMPSON: Thank you for your comment.
- The next speaker is Paul Ames. Paul, we do not

- 1 currently see you listed among the attendees. However,
- 2 if you have joined using a different name, we would ask
- 3 that you raise your hand at this time and if you have
- 4 called in, you may raise your hand by dialing Star 9 on
- 5 your phone.
- 6 (No response.)
- 7 MS. THOMPSON: Okay. We will move on to the next
- 8 speaker.
- 9 The next speaker is Stephanie Beitzel Snow. You
- 10 may now unmute and please state your name and
- 11 affiliation for the record.
- MS. SNOW: Hello. Can everyone hear me?
- MS. THOMPSON: Yes.
- MS. SNOW: Good afternoon. My name is Stephanie
- 15 Beitzel Snow from the Wiscauke Settlement in Central
- 16 Iowa.
- 17 I'm of mixed tribal heritage. I'm an (Indian
- 18 tribe). I'm an enrolled member of the Hotu Nation.
- 19 I'm a cultural consultant active in food sovereignty.
- I'm a school educator, a trained anthropologist, a
- poet, a musician, and, most importantly, I'm a mother
- of two teen-aged children.

- 1 I'm here to speak as a business woman and also as
- 2 a member of Eco Madres. Eco Madres is a program of
- 3 Moms Clean Air Force focused specifically on how Latino
- 4 and Native communities are affected by air pollution
- 5 and climate change because our communities tend to face
- 6 more environmental justice challenges than the average
- 7 person in the United States.
- About a year ago -- excuse me. I thought they
- 9 were going to do some maintenance today.
- So about a year ago, my tribe's natural landscape
- 11 was devastated by the Dureches storm that occurred
- 12 nationwide. It flattened our ancestral cornfields and
- we had to rush to carry out an emergency harvest of
- 14 what we could.
- We are a contemporary community, but our
- 16 Indigenous traditions are of fundamental importance to
- us for many reasons. Having our ancestral corn
- 18 flattened and losing so many trees to an uncommonly
- 19 strong storm was really traumatic.
- The climate crisis has brought the need for
- 21 Indigenous resilience into sharp focus. Without
- immediate action to address the root causes of climate

- 1 change, carbon pollution from burning fossil fuels, our
- 2 communities are facing increasingly frequent and severe
- 3 weather events causing the kind of destruction, death,
- 4 and damage that swept across our lands last year.
- 5 My memories of childhood include seeing my great
- 6 grandmother bent over in one of her three large garden
- 7 plots coaxing vegetables and our precious corn with
- 8 care from this land that is Iowa.
- 9 Years ago, she would dig her lotus root in lakes
- 10 and ponds for food and she used as medicine. She
- 11 gathered foods and medicines to feed and cure her
- 12 family and community. She passed these ways on to me
- 13 and I in turn have raised my children in the same way.
- 14 Climate change has been making it more and more
- difficult to find the plants we need for our way of
- 16 life. Transportation sector is the largest source of
- 17 carbon pollution in the United States and cleaning up
- vehicle pollution is one of the most important things
- 19 that we can do to fight climate change.
- Thank you for the chance to testify before this
- 21 panel on the Revised 2023 Later Model Year Light-Duty
- Vehicle Greenhouse Gas Emissions Standards and I plead

- 1 with you to finalize the strongest possible national
- vehicle greenhouse gas emission standards for passenger
- 3 cars and light trucks.
- 4 Thank you very much.
- 5 MS. THOMPSON: Thank you for your testimony.
- The next speaker will be Marc Drehsen. Marc, you
- ⁷ should be able to unmute on your phone at this time.
- 8 MR. DREHSEN: Hello.
- 9 MS. THOMPSON: Hi.
- MR. DREHSEN: Hi. This is Marc Drehsen. Can you
- 11 hear me?
- MS. THOMPSON: We can hear you and you are welcome
- to begin your comment at any time.
- MR. DREHSEN: Thank you.
- 15 I'm speaking as a member of the Union of Concerned
- 16 Scientists.
- Gas mileage of new vehicles hasn't really improved
- in at least 25 years. For example, my new Honda CRV
- 19 gets virtually the same mileage as my 1995 Subaru
- 20 Legacy did when it was new. The problem is vehicles
- 21 keep getting bigger, especially pickup trucks, and
- they're getting heavier with all the safety equipment

- 1 and electronics. In fact, you can't even find a small
- 2 pickup truck these days.
- We really need to limit the weight on vehicles if
- 4 we're going to make a difference.
- 5 EPA must set the strongest possible federal clean
- 6 air standards to ensure we are protecting families from
- 7 vehicle pollution, we're saving drivers' money at the
- 8 pump, and we're fighting climate change.
- 9 This means restoring standards to at least the
- 10 level set during the Obama/Biden Administration and
- ideally even stronger than the Obama-era standards.
- 12 I don't see any reason why we can't do this.
- 13 Thank you very much.
- MS. THOMPSON: Thank you for your comment.
- 15 As a reminder, if you are speaking today, you will
- 16 receive a notification on your screen that you are
- being promoted to the role of panelist shortly prior to
- 18 your speaking time. You must accept that invitation to
- 19 be able to unmute when you are called to testify. This
- will also allow you to turn on your camera which we
- 21 encourage you to do.
- Speakers connected by telephone should unmute

- 1 their phones when called to testify.
- If you have joined using a name other than what is
- 3 listed on the speaker list or have dialed in, we ask
- 4 that you please raise your hand when called on so we
- 5 can promote you to the role of panelist. If you have
- 6 dialed in, you can raise your hand by dialing Star 9.
- 7 If you are having technical difficulties, please
- 8 send an e-mail to public_hearing@abtassoc.com or call
- 9 919-294-7712. If you are not registered to speak but
- 10 you would like to, please send an e-mail with your name
- and phone number to public_hearing@abtassoc.com or call
- 12 919-294-7712.
- 13 At this time, we will be moving on to speakers
- 14 from the next block who are currently available.
- 15 Speaker Block 5
- MS. THOMPSON: The first speaker will be Philip
- 17 Cuny. Philip, I will be promoting you to panelist now
- and when you are ready, you may unmute and please state
- 19 your name and affiliation for the record.
- MR. CUNY: Hello. Can you hear me?
- MS. THOMPSON: We can hear you.
- MR. CUNY: Okay. Can you see me?

- MS. THOMPSON: We cannot see you yet. You will
- need to hit the Start Video button on the lower left-
- 3 hand side of your screen to turn on video.
- 4 MR. CUNY: Okay. Can you see me now?
- 5 MS. THOMPSON: We can.
- 6 MR. CUNY: Okay. I'm sorry.
- Good afternoon. My name is Philip Cuny. I live
- 8 in Dallas, Texas. I'm retired and I am speaking as a
- ⁹ private citizen.
- 10 Recently, the United Nations Climate Report was
- 11 released and our future does not look good. I'm not so
- worried about my own future but I have children and
- 13 grandchildren and I'm scared to death for them.
- 14 The main take-away from the Climate Report is that
- 15 governments all over the world need to act now. the
- problem with this is that there are a lot of things
- that we cannot do now. We can't stop China from
- building coal-fired power plants. We haven't perfected
- 19 a way to manufacture concrete and steel without
- 20 producing CO2, as well, and this accounts for over
- 21 eight percent of the CO2 currently produced worldwide,
- 22 and with the passage of the infrastructure bill, we're

- 1 going to be making a whole lot more steel and concrete.
- We don't have electric 18-wheelers. We don't have
- 3 electric tractors for farming and God only knows how
- 4 we're going to reform the livestock industry.
- One thing we can do right now, though, is raise
- 6 these mileage standards and emission standards for cars
- 7 and light trucks. This is probably not going to be
- 8 very popular in Texas where it seems everybody drives a
- ⁹ truck, but it is the right thing to do.
- 10 For years, SUVs have been allowed to dodge the
- 11 mileage standards because they are classified as light
- trucks which is really ridiculous. They are designed to
- carry passengers. They really are passenger vehicles
- 14 and now many trucks have four doors and they are used
- more as passenger vehicles than trucks.
- 16 If we're not going to redesignate these vehicles
- 17 as passenger vehicles, we need to at least raise the
- 18 standards.
- 19 I'm not going to try to list all the benefits of
- 20 raising the standards. You've heard plenty about that.
- 21 It affects our public health and national parks,
- 22 etcetera, etcetera.

- What I want to impress upon you is that we need to
- act now. I read yesterday that the scientists believe
- 3 that the Atlantic current is on the verge of collapse.
- 4 This will have catastrophic effects on the climate of
- 5 England and Europe, not to mention our own fishing
- 6 industry.
- 7 It's beginning to rain on the Greenland ice
- 8 sheets. This is something that was once impossible.
- 9 We must act now.
- Once again, raising mileage standards and cleaning
- up vehicle emissions is one of the few things that we
- 12 can do now. I urge you to raise these standards as
- 13 high as feasibly possible to make our transportation
- 14 system the most efficient in the world. Let's lead by
- example. We need to do this for our children and our
- 16 grandchildren.
- 17 Thank you.
- MS. THOMPSON: Thank you for your comment.
- 19 The next speaker will be from an earlier block.
- Jackie Garcia Mann. Jackie, you will need to accept
- the invitation to be promoted to panelist in order for
- us to hear you today. You should at this time have the

- 1 ability to unmute or it looks like you're rejoining us
- ² a panelist. Fantastic.
- When you are ready, feel free to unmute and please
- 4 state your name and affiliation for the record.
- 5 MS. GARCIA: Hi. This is Jackie Garcia. Can you
- 6 hear me?
- 7 MS. THOMPSON: We can.
- 8 MS. GARCIA: Yeah. Hi. I am calling on behalf of
- 9 350 Bay Area, and like everyone else who has spoken
- with such great eloquence about what must be done in
- 11 the climate crisis, I want to say that, you know,
- there's nothing else I can personally do in my life to
- 13 cut out carbon. I'm doing everything I can with
- 14 electric cars and solar panels and induction stoves,
- but the people at the EPA making these decisions, they
- 16 have that power, and I urge you to be a climate super-
- 17 hero.
- You are representing people who are so afraid for
- their future and their children's future and all the
- displacement and harm that will be done to humanity and
- to the ecosystems and the crisis in biodiversity.
- So please show your bravery. We need things even

- 1 stricter than these proposed regulations. We need to
- 2 move fast and people are ready to cooperate. People
- 3 are ready to help. Don't listen to the industry
- 4 people. You know, these are corporations who will
- 5 never change and corporations have no conscience. They
- 6 are just in it for the profit. So please step up and
- 7 be a climate super-hero.
- I want to say that personally my mother is a
- 9 Holocaust survivor. She came here after the War when
- 10 she was 11. Her little sister starved to death in a
- displaced person's camp in Siberia. My mother would
- 12 not have survived if people didn't take action and join
- 13 the War.
- So I'm asking you today to join the war and to
- 15 look out for future generations.
- 16 Thank you very much.
- MS. THOMPSON: Thank you for your comment.
- The next speaker will be Karen Melton. As a
- 19 reminder, you will need to accept the invitation to
- 20 become a panelist in order for us to hear you today.
- 21 Karen, I just gave you the ability to unmute. If you
- would like to make your testimony, just a note that you

- 1 will not be able to be on camera.
- When you are ready, feel free to unmute and state
- your name and affiliation for the record.
- 4 MR. WILLIAMS: Thank you.
- I am Emerson Williams. I'm testifying before you
- 6 today on behalf of my son, his future children, and for
- 7 nature herself.
- I'm a father, former Marine, environmental policy
- 9 entrepreneur, and ally and proud member of the LGBTQ+
- 10 community. I acknowledge the lands I occupy belong to
- the sovereign nations of Sioux, Ute, Cheyenne, and
- 12 Arapahoe Indigenous People.
- First, I appreciate EPA's diligence in trying to
- 14 get us back on track with these standards. However,
- the plain truth is this. The proposed rule before us
- today is not only not new, it is wholly inadequate.
- This refreshed rule originates from Executive
- Order 14037 which states in part America must lead the
- world on clean and efficient cars and trucks by setting
- a goal that 50 percent of all new passenger cars and
- 21 light trucks sold in 2030 be zero emission vehicles.
- This proposed rule, even if the second alternative

- 1 were implemented, falls terribly short of this order.
- In fact, with the second alternative implemented, the
- 3 allowed combined cars and trucks grams CO2 per mile by
- 4 2026 is 161. This means we are yet again passing the
- 5 buck to the next EPA, next Administration, etcetera,
- 6 and it is a huge burden to pass on.
- 7 To reach the goals expressed in the Executive
- 8 Order, this future they will need to implement
- 9 standards to remove 161 grams CO2 per mile in only four
- 10 years, nearly triple the reductions in this proposal.
- 11 Further, these standards are still decades behind
- the rest of the developed world. In 2009, the EU
- implemented standards to reduce their emissions to 153
- 14 grams CO2 per mile by 2020. They have since updated
- these goals and far surpassed our efforts.
- 16 China likewise enacted the Euro 4 standards in
- 17 2010 which includes very strict standards for CO2 as
- well as other pollutants. Both regions also have
- 19 strict enforcement mechanisms which this proposed rule
- 20 is decidedly lacking.
- I understand my statement today may come across as
- 22 accusatory and unsympathetic to the work done to bring

- 1 us here. I assure you that is not my intent. Rather,
- 2 I am very upset by the extraordinary lack of leadership
- 3 and urgency I continue to see around environmental
- 4 issues.
- We simply do not have the luxury of slowly ramping
- 6 up standards or relying on the supposed promises of the
- 7 capitalist market that caused this impending global
- 8 disaster.
- 9 In conclusion, I recommend EPA go back and write a
- 10 new rule, a rule that sets zero emissions standards to
- be met no later than 2030, a rule with strong
- 12 enforcement mechanisms.
- While you consider this, please do not consider
- 14 political feasibility or if it's too hard. Rather,
- consider how hard you want future generations to
- struggle for a breath of clean air, a drink of clean
- water and clean soil to grow food.
- We are able to choose now how the future will
- 19 judge us. Please, choose carefully.
- Thank you.
- MS. THOMPSON: Thank you for your comment.
- The next speaker will be Karen Melton. Karen, if

- 1 you are able, I invite you to join as a panelist.
- Otherwise, you should be able to unmute and whenever
- you are ready, you may unmute and please state your
- 4 name and affiliation for the record.
- MS. MELTON: Thank you for the opportunity to
- 6 testify.
- My name is Karen Melton, and I am here today as a
- 8 private citizen who cares about leaving a viable
- 9 climate and clean air for future generations.
- I do appreciate that this Administration is acting
- 11 to re-implement clean car standards but ask the EPA to
- 12 create the strongest possible limits on vehicle
- 13 pollution. These limits had already gone through the
- 14 technical review process. They will ensure the
- 15 greatest reductions in oil use and global warming
- 16 emissions.
- And to those manufacturers who turned their backs
- on efficiency commitments that were made in exchange
- 19 for having their industry bailed out by taxpayers, I
- will not forget who you are and I will certainly never
- 21 buy one of your vehicles.
- Here in Philadelphia, we have air quality that is

- 1 graded F by the American Lung Association and is the
- worst in our many environmental justice neighborhoods.
- 3 Those neighborhoods have double the national rate of
- 4 childhood asthma and the highest rates of trips to the
- 5 emergency room by children having acute asthma attacks.
- 6 With transportation as the largest source of
- 7 carbon emissions in the U.S., it's critical that we
- 8 both make our gasoline=powered trucks and cars more
- 9 efficient and that we shift rapidly to electric
- vehicles if we are to achieve a hundred percent zero
- emission vehicle sales by 2035 and net zero greenhouse
- 12 gas emissions economy by 2050.
- The impacts of climate change we see all around
- 14 the world today should tell you that we are way past
- the point where we can be creating loopholes and credit
- schemes to benefit automakers who are looking for ways
- 17 to stall on efficiency improvements.
- 18 Alternative Number 2 is the better proposal in
- 19 this regard.
- Once again, I urge this Administration to set the
- 21 strongest standards to make cars and light-duty trucks
- more efficient by going back to at least the Obama

- 1 standards.
- 2 Thank you.
- MS. THOMPSON: Thank you for your comment.
- 4 The next speaker will be Mary Mathews. You may
- 5 now unmute and please state your name and affiliation
- 6 for the record.
- 7 MS. MATHEWS: Good afternoon. I am Mary Mathews,
- 8 speaking on behalf of the League of Women Voters of
- 9 Lake County, Illinois.
- 10 I'm addressing the Proposed Revised 2023 and Later
- 11 Model Year Light-Duty Vehicle Greenhouse Gas Emissions
- 12 Standards.
- The stated purpose is to make the greenhouse gas
- emission standards more stringent, thereby
- 15 significantly reducing emissions.
- The proposed rule also will provide incentives for
- 17 manufacturing more hybrid and electric vehicles. These
- 18 changes should result in substantial public health
- 19 benefits.
- The League of Women Voters supports the maximum
- 21 protection of public health and the environment. To
- that end, the League has supported federal air

- 1 pollution controls for fuels and vehicles since 1971.
- We called for full implementation of the Clean Air
- 3 Act of 1970 and for strengthening amendments. The
- 4 League consistently has opposed extensions of deadlines
- 5 for meeting ambient air quality standards and auto
- 6 emission standards.
- 7 The League believes greenhouse gas emissions cause
- 8 not only air pollution but also contribute to the
- 9 climate crisis. Climate change is a serious threat as
- 10 proven in the Intergovernmental Panel on Climate Change
- 11 Report.
- 12 The League of Women Voters realizes that pollution
- 13 control is not enough. Pollution prevention is
- 14 required. Accordingly, the League has called for
- legislation to cut greenhouse gases, increase energy
- 16 efficiency, and shift to renewable energy.
- 17 The League opposed efforts by the Trump
- 18 Administration to roll back the clean car standards and
- 19 to withdraw from the 2015 Paris Climate Agreement.
- 20 As transportation is the largest source of carbon
- 21 emissions, restricting the emission of heat-trapping
- 22 gases will help mitigate climate change and combat

- 1 deadly air pollution.
- Air pollution caused by emissions has been proven
- 3 to increase the risk of heart disease, lung cancer, and
- 4 asthma. The requirement for transition to zero
- 5 emission cars within a short time frame will greatly
- 6 improve public health.
- 7 So far this summer, Lake County has suffered nine
- 8 orange unhealthy for sensitive groups air quality days
- 9 due to ozone. The asthma rate in Waukegan, the largest
- 10 city in Lake County, is much higher than average.
- 11 Waukegan is an environmental justice community which
- 12 experiences disproportionate harm from climate change.
- The previous Administration's rollback of clean
- 14 car rules curtailed progress in improving air quality
- 15 and moderating climate change. To make up for lost
- time for Waukegan and for all of our communities, the
- 17 League of Women Voters of Lake County calls for
- 18 standards that are at a minimum as strong as those
- 19 finalized in 2012 and without any loopholes and give-
- 20 aways to automakers. Stricter fuel efficiency
- 21 standards coupled with greenhouse gas reductions
- 22 standards, and enforceable requirements are needed.

- 1 Reducing carbon pollution and fighting climate
- 2 change must be a top priority for the EPA. The League
- of Women Voters of Lake County requests the clean car
- 4 standards be the strongest possible and effective as
- 5 soon as possible to protect public health and combat
- 6 the climate crisis.
- 7 Let's move to zero emissions before it is too
- 8 late.
- 9 Thank you for your time.
- MS. THOMPSON: Thank you for your comment.
- 11 At this time, we will begin a brief recess. EPA,
- when would you like to reconvene?
- MR. OLECHIW: Thank you, Kayla.
- So it is now a little past a quarter to the top of
- the hour. I would like to recess until 15 minutes
- 16 after the hour, so about a half hour break. So on the
- 17 East Coast that is a break until 3:15 p.m., and we will
- 18 reconvene then for the remainder of the testifiers.
- So I want to take this opportunity to thank
- 20 everyone that spoke this afternoon. We very much
- 21 appreciate your comments, and we look forward to
- 22 hearing from the final batch of testifiers. So the

- 1 break will commence now until 3:15.
- 2 Thank you so much.
- 3 (Recess.)
- 4 MS. MROZ: All right. It looks like everybody's
- 5 back. So, Kayla, you can go ahead and proceed.
- 6 MS. THOMPSON: Thank you. This is Kayla Thompson
- 7 from Abt Associates, EPA's contractor. It is currently
- 8 3:15 p.m. Eastern Time, and we are now rejoining EPA's
- 9 public hearing, Revised 2023 and Later Model Year
- 10 Light-Duty Vehicle Greenhouse Gas Emissions Standards
- 11 Proposal.
- 12 As a reminder, if you are speaking today, you will
- 13 receive a notification on your screen that you are
- 14 promoted to the role of panelist shortly prior to your
- 15 speaking time. You must accept that invitation to be
- able to unmute when you are called to testify. This
- will also allow you to turn on your camera, which we
- 18 encourage you to do. Speakers connected by telephone
- 19 should unmute their phones when called to testify.
- If you have joined using a name other than what is
- listed on the speaker list or have dialed in, we ask
- that you please raise your hand when called on so we

- 1 can promote you to the role of panelist. If you have
- 2 called in, you can raise your hand by dialing Star 9.
- 3 If you are having any technical difficulties, please
- 4 send an email to public_hearing@abtassoc.com or call
- 5 919-294-7712. If you are not registered to speak but
- 6 you would like to, please send an email to
- 7 public_hearing@abtassoc.com, or call 919-294-7712.
- 8 The expected speaking order is displayed on the
- 9 screen. I will be introducing each speaker in turn.
- 10 The next speaker will be William Davies. EPA, are you
- 11 ready to proceed?
- MR. OLECHIW: Thank you, Kayla. Yes, we are ready
- 13 to proceed. And while this is the -- intended to be
- 14 the sort of last block of speakers, we encourage anyone
- that would still like to speak to please use the
- 16 information shown on this slide to contact Abt and sign
- up. And, of course, we will stay here for as long as
- 18 people are willing to testify. And so, with that, we
- 19 should proceed. Thank you so much.
- MS. THOMPSON: Thank you. It appears that William
- is not yet listed as an attendee on our attendee list.
- However, William, if you have joined using a different

- 1 name today, we ask at this time that you raise your
- 2 right hand, and that if you have dialed in, you can do
- 3 so by dialing Star 9 on your phone.
- 4 (No response.)
- MS. THOMPSON: We'll go ahead and move on to the
- 6 next speaker. The next speaker on our list is Suzanne
- 7 Llewellyn. Similarly, we do not have you listed as an
- 8 attendee. However, we invite you to raise your hand at
- 9 this time if you are listed under a different name.
- 10 (No response.)
- MS. THOMPSON: Moving a little further down the
- 12 list, there are a couple of other speakers who are
- listed to speak but are not currently listed as
- 14 attendees. They are Connie King and Robin "Gil-oh" or
- 15 "Gill-oh." If you are here but you're listed under a
- 16 different name, we invite you to raise your hand at
- this time. As a reminder, if you've dialed in, you can
- do so by dialing Star 9 on your phone.
- 19 (No response.)
- MS. THOMPSON: Okay. The next speaker on our list
- 21 is James Noyes. You may now unmute, and please state
- your name and affiliation for the record.

- 1 MR. NOYES: Hi. This is James Noyes. I typically
- go by the name Graham Noyes, and I represent Pearson
- Fuels and also am the executive director of the Low
- 4 Carbon Fuels Coalition. And the comment that I'd like
- 5 to provide here, Pearson's been very active throughout
- 6 the process, the various iterations of the rule here in
- 7 commenting, and is the largest E85 supplier in
- 8 California. And I want to just provide the input to
- 9 the agency that there are tremendous opportunities with
- 10 flex fuel vehicles, with high-blend ethanol E85, with
- 11 mid-level ethanol blends, and with other biofuels to
- 12 provide greenhouse gas reductions that aren't currently
- integrated into the greenhouse gas proposed rule and
- 14 are, frankly, carbon reductions left on the table.
- Within California, we've seen over 75 million
- 16 metric tons of greenhouse gas reduction from the use of
- various low-carbon fuels and electricity over the last
- 18 10 years of the Low-Carbon Fuel Standard Program, and
- 19 85 percent of those reductions have been bio-based
- fuels, so we would very much encourage the agency to
- 21 consider the value of these fuels. They can be
- 22 utilized in existing internal combustion engines.

- 1 There's obviously a very strong drive to move toward
- ² electrification, but as everyone is aware, there are
- yery significant technology and cost barriers there,
- 4 and there's also the very long life of internal
- 5 combustion engines that are on the road.
- 6 We've seen in California very aggressive programs
- 7 to electrify the state that are having effect, but,
- 8 frankly, they're having effect slowly with still the
- 9 large dominance of the internal combustion engine.
- 10 And, therefore, we think California provides an
- indication that the agency should take very seriously
- of how important decarbonizing the internal combustion
- 13 side of the picture is, and also realizing that, to the
- 14 extent that there's not the encouragement of flex-fuel
- vehicles, or mid-level ethanol blends, or other
- 16 biofuels and technologies, then the default is to
- 17 fossil fuel with the increased criteria pollutant
- emissions and the increased greenhouse gases from those
- 19 fuels. Thank you for the time to participate in this
- 20 proceeding.
- MS. THOMPSON: Thank you for your comment. The
- 22 next speaker is Diana Gersten. Diana, we do not

- 1 currently see you listed among the attendees. However,
- 2 if you have joined using a different name, we ask that
- you raise your hand at this time. And as a reminder,
- 4 you can raise your hand if you have dialed in by
- 5 dialing Star 9 on your phone.
- 6 (No response.)
- 7 MS. THOMPSON: We will move on to the next
- 8 speaker. The next speaker is Langston Verdin. You may
- 9 now unmute, and please state your name and affiliation
- 10 for the record.
- MR. VERDIN: Hello, everyone. My name is Langston
- 12 Verdin, and even though it says I'm representing
- 13 Children's Health Alliance of Wisconsin where I work,
- 14 I'm actually here as a private citizen today and as a
- member of the Wisconsin Asthma Coalition. I live in
- 16 Milwaukee, Wisconsin as well.
- First off, I'd like to thank you all for this
- opportunity to speak with you today about this
- 19 important topic. I'd also like to thank President
- 20 Biden and his Administration for acknowledging the
- 21 importance of tackling climate change and pollution
- 22 from transportation. In Wisconsin, over half a million

- children and adults have asthma. It's the most common 1
- chronic condition among children and the leading cause
- of school absenteeism. In fact, each year, 1 in 2 kids
- 4 with asthma will miss at least one day of school
- 5 because of their asthma, and 1 in 4 adults will miss at
- 6 least one day at work. Worst yet, the Wisconsin
- 7 Department of Health Services finds that one person
- dies every day because of their asthma. Because of 8
- this, over the last two years, I've worked on a project
- 10 called Project Breathe SMAART, or Safely Monitoring Air
- 11 Around Town. This project started because when I was
- 12 analyzing asthma data from the Department of Health
- 13 Services, I found that asthma-related health care
- 14 utilization wasn't equally distributed across
- 15 Milwaukee. Instead, it's heavily concentrated among
- 16 high-traffic corridors in the city's black and Latinx
- 17 communities.
- 18 The transportation sector is the largest source of
- 19 greenhouse gas emissions in the state -- in the United
- 20 States. Gasoline and diesel-powered cars, SUV, and
- 21 pickup trucks pollute the air we breathe and drive
- 22 climate change. This proposal and the broader action

- on clean cars from the Administration are a meaningful
- 2 step in the right direction, but we need the strongest
- 3 possible clean car standards to truly make good on
- 4 President Biden's commitments to address climate action
- 5 and environmental justice. As a parent of a 12-year-
- 6 old with asthma, I urge the EPA and the Administration
- 7 to finalize this proposal quickly and move forward with
- 8 bold greenhouse gas and fuel efficiency standards for
- 9 cars, light trucks, and SUVs that accelerate the
- 10 critical transition to zero emission vehicles.
- 11 Thank you all for your time and allowing me to
- 12 share with you today.
- MS. THOMPSON: Thank you for your comment. The
- 14 next speaker is Victoria Gillet. We do not currently
- have you listed among the list of attendees. However,
- if you have joined under a different name, we invite
- 17 you to raise your hand at this time. And then as a
- reminder, you can raise your hand if you have dialed in
- 19 by dialing Star 9 on your phone.
- 20 (No response.)
- MS. THOMPSON: Okay. We will move on to our next
- 22 speaker. The next speaker is Claire Richards. Claire,

- 1 when you are ready, please unmute and state your name
- and affiliation for the record.
- 3 MS. RICHARDS: Thank you for the invitation to
- 4 speak today on the EPA ruling on light-duty vehicle
- 5 My name is Claire Richards, and I'm a
- 6 nursing professor and member of the Alliance of Nurses
- 7 for Healthy Environments. Part of my work focuses on
- 8 how we respond to emerging public health crises, such
- as the power outages that occur during extreme heat and
- 10 wildfire smoke events, all of which are on the rise due
- 11 to the climate crisis. I'm here to urge you to set the
- 12 strictest possible clean car standards.
- 13 As others have noted, the IPCC report states
- 14 clearly that we have already baked in enough carbon
- 15 emissions to warm our planet one-and-a-half degrees
- 16 Celsius. These emissions are permanent, irreversible,
- 17 and dangerous, and additional greenhouse gas emissions
- 18 will only worsen the situation. My family and I have
- 19 all been personally impacted by climate change.
- 20 sister-in-law's community of Mexico Beach, Florida was
- 21 leveled by the rapidly-intensifying Hurricane Michael
- 22 in 2018. The pile of broken homes turned into a

- 1 massive landfill. This summer, my husband, son, and I
- 2 escaped the extreme heat and wildfire smoke of Eastern
- Washington to sleep on a relative's floor on Whidbey
- 4 Island for clean air, only to face the painful reality
- of dead shellfish littering the beach. Hundreds of
- 6 people and billions of sea creatures died in the heat
- dome, and the production from a number of crops were
- 8 cut by half. Thousands of homes are now destroyed by
- 9 wildfires alone nearly every year. This impacts our
- 10 economy, our housing stock, and our physical and our
- 11 mental health. I'm very alarmed about whether our
- 12 five-year-old son will be able to thrive when he's my
- 13 age. This depends on the decisions that we make now.
- Exposure to wildfire smoke has significant health
- 15 impacts on lungs, hearts, and brains, especially for
- 16 pregnant women, infants and children, and those with
- 17 chronic illnesses. Extreme heat not only makes
- wildfires more likely. It also amplifies the effect of
- 19 air pollution on human health. Given structural
- inequity and the history of redlining in the United
- 21 States, this disproportionately affects low-income
- 22 communities and black, indigenous, and people of color.

- 1 This means that to achieve the environmental justice
- 2 agenda of the Biden Administration, a rapid transition
- 3 to clean transportation is necessary.
- 4 We need to slow the progression of climate change
- 5 without delay within our infrastructure and systems.
- 6 This means that the EPA must finalize an ambitious rule
- 7 this year in 2021 without any loopholes. It is
- 8 critical that we have a long-term plan. The EPA must
- 9 also set stronger standards through at least 2030 to
- 10 drive the transition to zero emission vehicles the
- 11 Nation needs and that President Biden has called for in
- 12 his executive order. We must cut emissions as quickly
- 13 as possible from gasoline cars and increase the
- 14 adoption of electric vehicles so that we can get to a
- 15 100-percent electric new car market by 2035. Thank
- 16 you.
- MS. THOMPSON: Thank you for your comment. The
- 18 next speaker will be Jack Darin. Jack, you may now
- unmute, and please state your name and affiliation for
- 20 the record.
- MR. DARIN: Thank you. My name Jack Darin. I'm
- the director of the Sierra Club Illinois chapter, and

- 1 I'm representing over 120,000 of our members and
- supporters here in Illinois. And I want to thank you
- 3 for the opportunity today to testify and for holding
- 4 this hearing.
- So, vehicle emissions are the major air quality 5
- 6 challenge in Illinois when it comes to both the global
- 7 existential threat of climate change and also the local
- urgent public health threat of certain smog pollution 8
- on days like we're experiencing this week.
- 10 yesterday, according to EPA's Air Now website, the Air
- 11 Quality Index for Chicago and its west and north
- 12 suburbs, so most of our region, exceeded 150 in the
- 13 unhealthy category. And just briefly, here's what EPA
- 14 advised us to do yesterday based on that level of
- 15 pollution. It said that "Sensitive groups should avoid
- 16 prolonged or heavy outdoor exertion and schedule
- 17 outdoor activities in the morning when ozone is lower.
- Consider moving activities indoors." This, of course, 18
- 19 is during a pandemic. "People with asthma, keep quick
- 20 relief medicine handy, and everyone else, reduce
- 21 prolonged or heavy outdoor exertion. Take more breaks
- or do less intense activities. Schedule outdoor 22

- 1 activities in the morning when ozone is lower."
- Now, of course, those sensitive groups are more
- 3 likely to be people of color and other environmental
- 4 justice communities that have already been
- disproportionately impacted by this pandemic and by 5
- 6 pollution generally. And the largest source of the
- 7 pollution causing this public health threat is
- transportation. Emissions from electric vehicles, such 8
- as PM 2.5, are a major public health hazard, and Asian-
- 10 American, black, and Latino residents of Illinois are
- 11 exposed to higher-than-average levels of particulate
- 12 matter from cars, trucks, and buses. Chicago and the
- 13 rest of Cook County has the state's highest PM 2.5
- 14 pollution exposure, again, due in large part to the
- 15 transportation sources.
- 16 The transportation sector is also the largest
- 17 source of Illinois' climate-disrupting emissions after
- 18 we've made some reductions in our electric sector, and
- 19 so the main source within transportation is coming from
- 20 the passenger vehicles we're talking about today. And
- 21 Illinois has definitely experienced climate change.
- 22 Our precipitation has increased substantially. We have

- 1 more torrential downpours and devastating floods,
- 2 including in our Illinois and Mississippi Rivers. Our
- 3 average daily temperatures have risen one to two
- 4 degrees Fahrenheit in most areas of the state, making
- our summers hotter, and our winters warmer, and our
- 6 droughts longer and more severe. Our Lake Michigan
- ⁷ shoreline of late is crumbling under record lake levels
- 8 and extreme weather, and agriculture is very important
- 9 in Illinois. We're the sixth largest agricultural
- state in the country, and our ability to feed
- ourselves, and the rest of the country, and indeed the
- world, will be diminished if the climate crisis is not
- 13 mitigated.
- Now, as a state, Illinois is beginning to move
- boldly to address these threats, but we need to be
- building on a baseline of the strongest possible
- 17 national vehicle standards for emissions. Here in
- 18 Illinois, the Sierra Club is part of the Illinois Clean
- 19 Jobs Coalition, which has put forth a plan to get one
- 20 million electric vehicles on the road here by 2030,
- while prioritizing equity and attainability for all.
- 22 And this goal has recently been championed by our

- 1 governor, J.B. Pritzker, who is making state
- 2 investments in electric vehicles infrastructure and in
- 3 fleets and seeing the real potential for our state as a
- 4 center for EV manufacturing. So, we are moving ahead
- 5 here, but we'll make the most progress if we're doing
- 6 so on top of the strongest possible national emission
- ⁷ standards.
- The original clean car standards passed in 2012
- 9 under President Obama were an effective tool to reduce
- 10 emissions from vehicles, and in 2020, our state
- defended public health and the environment by suing the
- 12 previous Administration for its reversal of those
- 13 standards. And today we're at a point where we have
- the opportunity to set the record straight on where our
- priorities lie on key issues like climate change and
- public health. We can either go back and set a rule
- that is weaker than the one we originally had under the
- 18 Obama Administration, or we can recognize that the
- 19 impacts of climate change have gotten worse and that we
- 20 must set the boldest standards possible that exceed
- even the one finalized in 2012. Not doing that and
- 22 setting a bold standard means that Illinois will

- 1 continue to face intensifying climate disasters and not
- doing everything we can to protect the most vulnerable.
- 3 It's clear that not only do we need to clamp down
- 4 on vehicle pollution, but we need to create policies
- 5 that reflect the gravity of our climate crisis and
- center environmental justice. And that's why I'm here 6
- 7 today to urge EPA to set the strongest rule possible
- 8 that will get us on track to 100 percent EV sales by
- To do so would offer hope for a healthier future
- 10 to those who are worried about breathing the air that
- 11 we have today, and not doing so would mean that we'll
- 12 face the catastrophic consequences of climate change
- 13 that the recent IPCC report laid out as a code red for
- 14 humanity. So, I hope we can heed that call for change
- 15 and adopt the strongest possible standards.
- 16 listening today.
- 17 Thank you for your comment. MS. THOMPSON:
- 18 next speaker is Frank Granda. We do not currently see
- 19 you listed among the list of attendees. However, if
- 20 you have joined under a different name, we would invite
- 21 you to -- we would invite you raise your hand at this
- 22 And if you have called in, you can do so by time.

- dialing Star 9 on your phone.
- 2 (No response.)
- MS. THOMPSON: Okay. We will move on to the next
- 4 speaker. The next speaker on our list is Kelly
- 5 Fleming. Kelly, you may now unmute, and please state
- 6 your name and affiliation for the record.
- 7 MS. FLEMING: Thank you. My name is Kelly
- 8 Fleming. I'm the policy director for the Zero Emission
- 9 Transportation Association. Thank you for providing
- the opportunity to speak today on behalf of the Zero
- 11 Mission Transportation Association, or ZETA. We are an
- industry-backed coalition advocating for 100 percent
- electric vehicle sales by 2030. Our member companies
- 14 are on the cutting edge of innovation in the EV space,
- 15 from two-wheeled vehicles to medium and heavy-duty
- 16 trucks, and we represent a majority of the market for
- 17 electric light-duty vehicles.
- 18 ZETA thanks the Administration for prioritizing
- 19 the reduction of emissions from transportation through
- the proposed standards, and we look forward to working
- with you to ensure a zero-emission transportation
- future with the United States being dominant in the

- 1 auto industry once again. We recognize that without
- 2 electrification of the transportation sector, there is
- 3 no way the United States will meet its climate targets.
- 4 To that end, a proposal that will achieve just over
- 5 eight percent EV deployment in Model Year 2026 misses
- 6 the mark.
- While the proposed stringency of Alternative 2
- 8 standards may be a step in the right direction, ZETA
- 9 recommends that the agency implement a rule that is
- 10 much more stringent than any of the proposals analyzed.
- 11 ZETA members, including Rivian, Tesla, and Lucid,
- 12 among others, have created over 250,000 American jobs
- 13 and are scheduled to produce and accelerate the
- 14 delivery of a variety of electric vehicles during the
- 15 implementation of the new rule. Some of these
- 16 automakers and models are debuting in the next two
- years, so the EPA's 2017 baseline using the impact
- 18 analysis of the proposed standards neither accounts for
- 19 these new entrants nor the large deployment of EVs
- 20 post-2017, like the Tesla Model 3. Because of this,
- 21 electric vehicles and trucks will make up a larger
- 22 portion of the new vehicle market in 2023 to 2026 than

- 1 projected.
- With this in mind, ZETA discourages the inclusion
- of potential loopholes to meet the proposed standards
- 4 through overly generous crediting, particularly for
- 5 technologies that are no longer contributing to the
- 6 reduction in emissions from the transportation sector.
- 7 Analysis shows that these extensions could result in an
- 8 additional 130 million metric tons of greenhouse gas
- 9 emissions compared to Alternative 2. Rather than
- 10 artificially expanding the lifetime of older
- technologies, the standard should be pushing the entire
- 12 auto industry towards electrification. Extending the
- 13 lifetime of credits, including multipliers that double
- 14 the credits earned for every EV sold, weakens the
- 15 standards and indirectly incentivizes traditional
- 16 automakers to continue manufacturing their least
- efficient vehicles, especially as EVs reach price
- 18 parity.
- 19 Extension of credits like those for the hybrid
- trucks are outdated. While it made sense to provide
- these incentives when electric drivetrains were still
- being innovated, we currently have fully-electric

- 1 pickup trucks slated to be on the road by 2023,
- ² including from Rivian, Tesla, and Ford. The same is
- 3 true for advanced clean vehicle technologies included
- 4 for off-cycle credits. ZETA fully supports ambitious
- 5 standards to cut greenhouse gas emissions and expanding
- 6 the stringency of Alternative 2 with the elimination of
- 7 extended credits.
- 8 ZETA's members are already demonstrating that EV
- 9 innovation and job creation go hand in hand. We urge
- the Biden Administration to accelerate this transition
- 11 and expedite the economic and environmental benefits of
- 12 light-duty vehicle electrification. Thank you for the
- opportunity to testify.
- MS. THOMPSON: Thank you for your comment. Our
- 15 next speaker will be Dana Gersten. If you have called
- in, we ask that you raise your hand by dialing Star 9
- on your phone, and we will unmute you. I can see that
- 18 you've raised your hand. You should now have the
- ability to unmute, and then when you are ready, you may
- state your name and affiliation for the record.
- DR. GERSTEN: Hi. Can you hear me?
- MS. THOMPSON: We can.

- DR. GERSTEN: Okay. Hi. My name is Dr. Dana
- 2 Gersten, and I am testifying today as a private
- 3 citizen. I work as a family medicine doctor at a
- 4 primary care clinic for the uninsured, underinsured,
- 5 and working poor in Berkeley, California, and also at a
- 6 community safety net hospital. I take care of newborns
- ⁷ to the very elderly, and I see our poor air quality
- 8 affecting so many. I'm here to urge the EPA to adopt
- 9 the strongest possible clean air standards because my
- 10 patients simply can't keep breathing dirty air and live
- 11 healthy lives.
- I see the effects of climate change on my patients
- 13 almost daily as it directly causes some health
- 14 emergencies and makes others worse. Many of my
- patients have lung conditions, like asthma or COPD, as
- well as heart conditions. We live in a large city with
- truck and air pollution. This year, like last year,
- 18 large wildfires make air quality even worse, sending
- 19 many to the hospital. They breathe unrelenting smoke
- this time of year, and the poor air quality exacerbates
- their health condition, sending many to the hospital
- 22 for intensive care.

- 1 I think because so many of my patients are living
- 2 on the edge of making it and not making it, these
- 3 health exacerbations can send them over the edge into
- 4 poverty. For example, when I was doing training in
- 5 Oregon, I had a patient who was a farm worker who
- 6 worked with the grape harvest. Wildfires destroyed the
- 7 harvest, and he was not able to make any money. His
- 8 electricity bill went unpaid, and his electricity was
- 9 turned off. He couldn't keep his insulin cold, and
- then he went into a dangerous hyperglycemia. He became
- 11 acutely ill, and when he returned back, he was unable
- 12 to work. So, I think the cycle of poverty and ill
- 13 health just keeps on going, affecting people who take
- 14 care of my patients and also the people they take care
- of, like their spouses and their children.
- Our health care system can't afford to keep
- 17 covering the costs of weak auto pollution standards.
- 18 Especially with COVID, our hospital is near capacity,
- and there simply isn't room to treat all of the
- 20 incoming patients with respiratory issues. Many of the
- 21 people most at risk for lung conditions are already the
- 22 most vulnerable: the working poor and people of color.

- 1 The failure to have the strongest possible clean air
- standards entrench the cycle of poverty that is
- profound and increasingly difficult to escape. What's
- 4 more, the ever-increasing amount of climate disasters
- 5 we face in California takes a serious toll on mental
- 6 health. Depression and suicide rates are quite high
- 7 already, and when you pile wildfire smoke and COVID
- that keep people indoors, the effects can be 8
- 9 heartbreaking, especially on children and teens.
- 10 The EPA needs to adopt its alternative standard
- 11 and enact the strongest possible rule that has
- 12 aggressive targets, no loopholes, and which puts us on
- 13 the path to zero emission future. I'm doing this on
- 14 behalf of my patients who simply can't afford to wait
- 15 any more. Thank you so very much.
- 16 MS. THOMPSON: Thank you for your comment.
- 17 this time, we have no one else scheduled to speak.
- 18 there is anyone who did not register to speak but would
- 19 like to, please send an email with your name and phone
- 20 number to public hearing@abtassoc.com or call 919-294-
- 21 7712. I would also like to provide an opportunity for
- 22 anyone who was scheduled to speak but may have joined a

- 1 little bit late to raise their hand, and we can promote
- 2 you to panelist to give your testimony. I can see that
- 3 Stephen Wyman has his hand raised, so, Stephen, I will
- 4 be promoting you to panelist, and you'll need to accept
- 5 that invitation in order to speak. When you are ready,
- 6 you may state your name and affiliation for the record.
- 7 MR. WYMAN: My name is Stephen Wyman. I am the
- 8 founder and CEO of Evolving Electric Company, and I
- 9 would like to suggest the EPA regulations must push
- 10 existing technologies to the fore, highlighting
- 11 reducing greenhouse gas emissions, reducing
- methodologies that have existed for decades that are
- 13 somewhere between scarce and unknown in vehicles
- 14 available today.
- First, full-series hybrid electric vehicles, like
- 16 Nissan's Note ePOWER, or General Dynamics Land Systems
- 17 RST-V, also known as Shadow. This technology can scale
- 18 from the smallest to the largest vehicles in use today.
- 19 Second, the skateboard undercarriage that allows
- 20 larger battery capacity unobtrusively. This technology
- 21 is applied to the new Ford F-150 Lightning as well as
- 22 being planned for use in a variety of battery electric

- 1 vehicle platforms. The skateboard could also be used
- in buses, truck, trailers, train cars, and recreational
- yehicles. Third, regenerative braking could be applied
- 4 to all axels, and the appropriate motor generator could
- 5 also help heavy vehicles climb hills, move train cars
- 6 around the railyard and tractor trailers around
- ⁷ shipping and receiving docks. Fourth, use of solar
- 8 panels could be especially useful for train cars,
- ⁹ tractor trailers, buses, and RVs.
- 10 It is clear that without specific, defined, and
- 11 regulated direction from the EPA, vehicle manufacturers
- 12 are more inclined to respond to pressure from powerful
- voices and industries that want to maximize profit
- 14 margins from oil and gas products for as long as it is
- 15 possible, consequences be damned. The EPA must
- delineate a specific direction or significant progress
- in reducing greenhouse gas emissions from vehicles may
- 18 not soon be forthcoming. I implore the EPA to create a
- 19 rigorous regulatory regiment devoid of loopholes to
- 20 expedite greenhouse -- reduce greenhouse gas emissions
- 21 from vehicles. Thanks for the opportunity to present
- 22 my perspective.

- 1 MS. THOMPSON: Thank you for your comment.
- would like to again invite anyone who has registered to
- speak, but perhaps we had missed, to raise their hand,
- 4 and we can promote you to panelist so you can provide
- 5 your comments. Apologies. There's a storm outside.
- 6 (No response.)
- 7 MS. THOMPSON: Okay. Another reminder.
- 8 this time do not have anyone else scheduled to speak.
- However, if there is anyone who did not register to
- 10 speak but would like to, please send an email with your
- 11 name and phone number to public_hearing@abtassoc.com or
- call 919-294-7712. We will now pause to see if anyone 12
- 13 else would like to make a statement.
- 14 (Pause.)
- 15 MR. OLECHIW: So, Kayla, it seems like we have a
- 16 short break in the number of speakers that we have
- 17 I wonder if we should just take a 10-minute right now.
- 18 pause and come back at the top of the hour at 4 p.m.
- 19 and see if there's anyone else that would be interested
- 20 in speaking. It looks like David -- I'm sorry -- Frank
- 21 has made the appropriate adjustment. So, we'll take
- 22 about a 10-minute pause here, and we'll come back at 4

- 1 p.m. to the call. I think about a 10-minute pause here
- and we'll come back at 4 p.m. and see if there's any
- other -- if there any other testifiers. If people are
- 4 coming off of meetings or finishing up work or
- 5 something like that, maybe this will give them an
- 6 opportunity to join the hearing one more time, so we'll
- 7 take a 10-minute pause. Thank you.
- 8 (Break.)
- 9 MS. THOMPSON: Hello, everyone. This is Kayla
- 10 Thompson from Abt Associates, EPA's contractor. It is
- 11 currently 4 p.m. Eastern Time. We are now rejoining
- 12 EPA's public hearing about their Revised 2023 and Later
- 13 Model Year Light-Duty Vehicle Greenhouse Gas Emissions
- 14 Standards Proposal.
- 15 At this time, we would like to invite anyone who
- would like to speak to raise their hand, and we can
- 17 promote you to panelist. I can see that, Victoria, you
- 18 have raised your hand. I will promote you to panelist
- 19 now. When you are ready, please feel free to unmute,
- 20 and state your name and affiliation for the record.
- DR. GILLET: Hi. My name is Victoria Gillet.
- 22 I'll start by thanking the EPA for holding a hearing on

- 1 such an important topic. I don't have any official
- ² affiliation. I'm a physician, and I'm strongly in
- 3 favor of the new proposed light-duty vehicle greenhouse
- 4 gas emission standards. I'm a primary care physician
- 5 starting a new practice in the City of Milwaukee in
- 6 Wisconsin, and I got into medicine to help people who
- 7 are suffering. I'm here today because there's only so
- 8 much that I can do to prevent that suffering from
- 9 within my exam room. I'm here today to advocate for
- 10 changes that decide whether my patients keep breathing
- 11 dirty air or if they can breathe easy and be healthy.
- I completed my training in the City of Madison in
- 13 Wisconsin, and the effects of clean air are very stark
- 14 there. There are sections of the city that are green
- and lush, and then there are parts of the city that are
- 16 close to overpasses and bus lots with idling large
- 17 vehicles, and during the pandemic, I saw the difference
- 18 is between these two locations. I had patients start
- 19 to come in as vehicles got back on the road with asthma
- 20 exacerbations. Those patients who are coming in more
- 21 frequently for those exacerbations were those who lived
- in those areas next to the vehicles, and it probably

- 1 comes as no surprise that those patients were also more
- likely to be people of color and low-income. We know
- 3 that these people are more likely to be located in
- 4 areas and cities where they're exposed to more air
- 5 pollution. We also know that they are more likely to
- 6 suffer the negative consequences of rising greenhouse
- 7 gas emissions as well as that particle pollution that
- 8 decreases their health outcomes and will be more
- 9 susceptible to increasing heat and other negative
- 10 consequences.
- Particle pollution, we know that there's no
- 12 specific safe amount, right? Even a small amount of
- exposure to air pollution can cause health consequences
- 14 across the life spectrum, from preterm birth to
- dementia and everything in between. And particularly,
- 16 it's been shown to decrease COVID outcomes, in
- 17 particular, for people who become infected. They're
- more likely to have severe outcomes and even death.
- 19 So, it's important to me that my patients have access
- to clean air regardless of where they live, even if
- they happen to be near locations where there are larger
- vehicles going by.

- 1 Thankfully, you know, I know that these are
- 2 harmful, but we also know the paths to the solution:
- 3 electrify everything as quickly as possible,
- 4 particularly transportation infrastructure, and make
- 5 the electricity that we need for those electrified
- 6 systems with local green energy. That transition will
- ⁷ save 2,000 or more lives per year just in my home State
- 8 of Wisconsin, and the benefit will disproportionately
- 9 be good for those who have had really negative health
- outcomes in the past.
- So, if we -- strong solution protections for
- vehicles, like the one that's being proposed by the EPA
- 13 right now, is a really important tool to facilitate
- 14 this transition. Therefore, I strongly support
- 15 strengthening the U.S. light-duty vehicle greenhouse
- 16 gas emission standards because this change will make my
- 17 patients and our country happier and healthier. That's
- 18 what I have.
- MS. THOMPSON: Thank you for your comment. If
- there is anyone who did not register to speak but would
- like to, we would encourage you to raise your hand at
- this time. I can see a couple of hands raised, and so

- 1 the first will be William Davies. I'm promoting you to
- panelist now. When you are ready, you may unmute, and
- 3 please state your name and affiliation for the record.
- 4 MR. DAVIES: Good afternoon. Can you hear me?
- 5 We can. MS. THOMPSON:
- 6 MR. DAVIES: Fantastic. Thank you so much for
- 7 My name is William Davies. I am a resident
- of Kansas City, Missouri. I am employed with the 8
- Sierra Club, Missouri Chapter, but I'm here speaking on
- 10 my own behalf as a concerned Missourian and Kansas
- 11 Citian. Thank you so much for taking the time to host
- 12 this public meeting.
- 13 And I'm here to speak as a husband, future father,
- 14 and resident in support of this important update on
- 15 vehicle emission standards and greenhouse gas emissions
- 16 as it will be vital to continuing to ensure that the
- 17 U.S. remains competitive in moving forward into a clean
- 18 energy future. And more importantly, I'm protecting
- 19 the health and well-being of all Americans, like my
- 20 friends and neighbors here in Kansas City.
- 21 I will try to be brief. I will not repeat some of
- 22 the great testimony that you all have heard as to why

- this -- the science behind this important standard and 1
- why it will benefit public health and the environment.
- I'll speak as a resident of a city that is trying to
- 4 do all it can to center equity and the well-being of
- 5 its residents in taking climate action, particularly in
- 6 the realm of building codes and building performance
- 7 standards and improving transportation both for transit
- and public transportation purposes, as well as city 8
- fleet vehicles, for doing the necessary work that needs
- 10 to be done.
- 11 Improving standards like this and setting at a
- 12 national standard, a national benchmark for improving
- emission standards for vehicles to help cities, like 13
- 14 Kansas City, and states and the private sector that are
- 15 looking to improve their vehicle performance because by
- 16 -- in order -- by working to meet standards set by the
- 17 Federal Government and by our leaders at the EPA, and
- 18 the Administration, and in Congress, it helps to --
- 19 helps these entities at the state level or at the local
- 20 level set targets to meet these ambitious goals, and
- 21 thereby improving efficiency, improving the business
- 22 models, and improving their technology so that they are

- 1 meeting standards that protect the health and well-
- 2 being of residents, and just to continue to advance
- 3 technology to make it better for the planet and better
- 4 for the environment. And this also helps create
- 5 important funding mechanisms to support continued
- 6 growth and expansion of better vehicle technology at
- ⁷ the city and the state level.
- 8 So that is all to say that by setting this --
- 9 these ambitious targets and setting the standard for
- the nation to follow, the EPA, by moving this rule
- 11 forward, will help cities and states continue to
- 12 advance and improving our vehicle technology, and
- 13 protecting the health of all Americans, and continue to
- 14 make sure that our industry is competitive, creating
- jobs in that new clean energy future. So, thank you so
- 16 much again for taking the time to host this public
- meeting and for allowing me to speak, and to reiterate
- 18 my support for advancing this updated standard. Thank
- 19 you so much for your time.
- MS. THOMPSON: Thank you for your comment. The
- 21 next speaker will be Heather Price. When you are
- 22 ready, please unmute and state your name and

- 1 affiliation for the record.
- DR. PRICE: Yes, hi. My name is Heather Price,
- 3 and my affiliation, I am a person in Washington State.
- 4 I'm also a climate scientist and atmospheric chemist,
- 5 and so I want to speak a little bit about my personal
- 6 experience with climate change and with the clean fuel
- ⁷ standards.
- I'm going to turn on my video.
- 9 So, I've had experience with owning a car that's
- 10 run on biodiesel, on biofuels, and I'm an atmospheric
- 11 chemist, so I've been working on global chemical
- 12 transport models and doing measurements. And over the
- 13 20 years that I've been an atmospheric chemist and a
- 14 climate scientist, my views have changed a lot. I used
- to think that hydrogen was going to be one of the main
- 16 solutions, even gray and blue hydrogen, which I
- encourage you to look up if you don't understand what
- those are. The only solution if we're going to use
- 19 hydrogen is if it is green hydrogen coming from clean
- 20 electricity. In terms of biofuels, I used to run my
- car on biodiesel, and through the work that I've been
- doing over the past 20 years, I've come to realize that

- 1 biofuels are also a delay tactic. They are not a
- 2 solution, that they produce the same air quality issues
- 3 and air pollution, particularly NOx pollution, and, in
- 4 some cases, more pollution.
- 5 So, in terms of health and air quality,
- 6 electrifying our vehicle fleet is really the only
- 7 solution that we have. And as we clean up our
- 8 electrical grid, then everything, right, this really
- 9 does get at the root of the climate crisis and how
- we're going to address it. It means electrifying
- 11 everything using zero carbon sources of electricity,
- 12 such as wind and solar. It means electrifying our
- vehicle fleet and coming up with ways of recycling the
- 14 batteries because, yes, there are issues with batteries
- and with the pollution there. But one of the issues
- 16 also with batteries, people talk about, oh, recycling.
- Well, the elements that are in those batteries are
- 18 there. They're transitioned, but --
- Oh sorry. I'm sorry. I got disconnected for a
- 20 second there.
- So, the elements within those batteries are always
- there. They're transitioning between redox states, but

- 1 they're not going into the atmosphere the way that,
- 2 say, when you burn toxic fossil fuels and those go into
- 3 the atmosphere either as methane or as carbon dioxide,
- 4 depending on fuel source.
- 5 The other thing I want to mention quickly is RNG,
- 6 which is called renewable natural gas, is also not a
- viable solution either in our pipelines or people's
- 8 homes. This is a little bit different than the clean
- 9 fuel standards for autos, but I think it's an important
- 10 piece of the puzzle because a lot of companies are
- 11 trying to say that RNG belongs in vehicles, too, and
- 12 natural gas is not clean. It is a climate wrecking
- 13 ball as it leaks. The latest IPCC report shows that
- 14 it's 84 times more potent than carbon dioxide, and when
- that leaks over time, it turns into carbon dioxide
- which persists for centuries, acidifying our oceans,
- 17 continuing to heat our planet. So, we really need true
- 18 solutions. We really need a strong -- you know, when
- 19 you're moving forward with these fuel standards, go as
- far as you can because we don't have much time. Make
- them really strong because we really need to get to
- 22 zero, and that means electrify, electrify, electrify.

- 1 And then also a little bit about my own personal
- 2 experience with climate. I live in Seattle, and we are
- ³ feeling the climate crisis firsthand. I have children
- 4 in my home with asthma who cannot go outside when it's
- 5 smoky. I have students who are homeless, who are stuck
- 6 outside in the smoke, and it is climate exacerbated. I
- 7 grew up here in Washington. I did -- I never saw smoke
- 8 in the Seattle area. Yes, on the east side it's -- you
- 9 know, forest fires over there are natural, but talking
- with the mayor of Twisp, I was in a talk with her at
- 11 the Pacific Science Center. And she talked about how
- 12 it used to be about two or three weeks of wildfires,
- and now she keeps fire equipment in her car because
- she's seeing more than a month of fire season in her
- 15 community. So, we are really being impacted by climate
- 16 change today, and we don't have any time left to wait.
- 17 So please, please, make the strongest
- 18 standards that you can. Thank you so much.
- MS. THOMPSON: Thank you for your comment. The
- 20 next speaker will be Varsha Singh. You may now unmute,
- 21 and please state your name and affiliation for the
- 22 record.

- 1 DR. SINGH: Hello. Good afternoon. This is
- afternoon in New Jersey. My name is Varsha Singh,
- 3 V-A-R-S-H-A, last name, S-I-N-G-H. I'm affiliated with
- 4 this group, Nurses for Climate Change. I signed up to
- be champion because I'm really passionate about doing 5
- 6 something as an individual for the climate, make it
- 7 better for future generation. That's all -- is my
- goal, so I really am appreciative of this opportunity 8
- to express my views about what's happening around us.
- 10 Thank you for this opportunity to speak with all of you
- 11 today because this is a critical topic.
- 12 I'd also like to thank President Biden and his
- 13 Administration for acknowledging the importance of
- 14 tackling climate pollution from transportation.
- 15 proposal and the broader actions on clean cars from the
- 16 Administration are a meaningful step in the right
- 17 direction, but we really need the strongest possible
- 18 clean air standards to truly make good on President
- 19 Biden's commitment to address climate action and
- 20 environmental justice.
- 21 I really want to talk about clean our climate
- 22 personally. I do -- I migrated from India in 1988, and

- 1 I did experience in my country what I would call
- 2 pollution where you have to wear a scarf around your
- ³ face when you are driving. So, emissions from vehicle,
- 4 this is something that is controllable, and that's why
- 5 I feel really passionate about the whole issue, and I
- 6 appreciate the time that I have here today to express
- 7 my views in front of this group. So, I -- I'm just
- 8 asking that what we can do as community leaders or as
- 9 an agency who is in charge of setting the standard so
- that the vehicles which are driving on the roads are
- 11 not adding to the carbon print that is already so
- 12 strong that we are experiencing the impact.
- In past 20 years that I have been in this country,
- 14 I love being in cleaner environment. I love the way I
- 15 feel about the greenery around me, and slowly I started
- 16 noticing how we have more rains, more floods. The heat
- is -- hotter days are increasing every year and slowly.
- And not only just me, but my son who is really a
- 19 strong advocate for making things possible to help
- everyone, actively participating individual
- 21 contributing to improve the climate for future. So,
- 22 what I'm saying here in this public hearing is that we

- 1 need stronger standards. There is a need for stronger
- 2 standards.
- 3 EPA's proposal is a necessary step towards
- 4 addressing the previous Administration's rollback of
- 5 cleaner car standards, but it's not only a start. You
- 6 must finalize this rule by this year, 2021, because we
- 7 really do not have time because the covered model year
- 8 is 2023 to 2026, and set up more health protection
- 9 standards beyond that. Please ensure that the
- 10 standards result in the real-world reductions in
- 11 greenhouse gas emissions, and please don't include any
- shortcuts for auto makers to cut corners. We know that
- car is necessary for every one of us, and we all are
- 14 going to use cars, but what we require is an eco-
- 15 friendly car.
- So, as an individual, as a responsible individual
- of this society and someone who really cares about the
- 18 future generation, as a nurse practitioner, we in this
- 19 country together want to see all citizens and residents
- breathing a good quality of air and enjoying the
- 21 quality of life that everyone deserves. As a
- 22 healthcare provider, this has been my message to all my

- 1 patients to everything. Prevention is better than
- 2 cure, and this case it applies to our standards, EPA
- 3 standards, as well. We can prevent so much disaster in
- 4 the future if we can just make the right standards.
- 5 Thank you so much for listening to me.
- 6 MS. THOMPSON: Thank you for your comment. At
- 7 this time, we have no one else scheduled to speak
- 8 during the current time slot. However, if there's
- 9 anyone who did not register to speak but would like to,
- we would invite you to raise your hand at this time.
- 11 And if you have called in, you may raise your hand by
- dialing Star 9 on your phone. Additionally, if you
- were registered to speak but not have -- but have not
- 14 yet provided your testimony, we also invite you to
- raise your hand at this time, and we will promote you
- 16 to panelist.
- 17 (No response.)
- MS. THOMPSON: Another brief reminder that if
- 19 you're having any technical difficulties, please send
- an email to public_hearing@abtassoc.com or call 919-
- 21 294-7712. We will be putting up a list of remaining
- registered speakers on the screen now. We invite,

- 1 again, anyone who registered to speak but has not yet
- 2 provided their testimony to use their hand at this
- 3 time, and we will promote you to panelist.
- 4 (No response.)
- 5 MR. OLECHIW: Just a short announcement. EPA
- 6 recognizes that there are some registered speakers that
- 7 have not yet had the opportunity to speak, and so, of
- 8 course, we'd very much like to hear from them if
- 9 they're available. And, of course, there may be some
- 10 late participants that identify themselves as speakers.
- 11 So, our intention is to stay to keep the hearing live
- 12 until 4:45 or until registers -- all registered
- 13 speakers that would like to speak have had the
- opportunity to do so, whichever comes first. So, we'll
- be standing by until at least 4:45. Thank you.
- 16 (No response.)
- MS. THOMPSON: As a reminder, the remaining
- 18 registered speakers are now listed on the screen. We
- invite anyone who is registered to speak but has not
- yet provided their testimony to raise their hand at
- this time. Additionally, if there is anyone who did
- not register to speak but would like to, we encourage

- 1 you also to raise your hand. And if you are having any
- 2 technical difficulties, please send an email to
- 3 public_hearing@abtassoc.com or call 919-294-7712.
- 4 (No response.)
- 5 MS. THOMPSON: I do not see any raised hands at
- 6 this time, but as Mike mentioned, we will be here until
- 7 4:45 or until all registered speakers have had a chance
- 8 to speak.
- 9 (No response.)
- MS. THOMPSON: Hello, everyone. As a reminder,
- the remaining registered speakers are now listed on the
- screen. We invite anyone who is registered to speak
- 13 but has not yet provided their comment to raise their
- 14 hand at this time. Additionally, if there is anyone
- who did not register to speak but would like to, we
- 16 encourage you to raise your hand, and we can promote
- 17 you to panelist to provide your comment. We will now
- pause to see if anyone else would like to testify.
- 19 (No response.)
- MS. THOMPSON: Hello, everyone. As a reminder,
- the remaining registered speakers are now listed on the
- 22 screen. We invite anyone who is registered to speak

- 1 but has not yet provided their testimony to raise their
- 2 hand at this time. Additionally, if there's anyone who
- 3 did not register to speak but would like to, we
- 4 encourage you to raise your hand, and we will promote
- 5 you to provide testimony.
- 6 (No response.)
- 7 MS. THOMPSON: I do not currently see any new
- 8 raised hands, and so we will take another pause to see
- 9 if anyone else would like to testify.
- 10 (No response.)
- MS. THOMPSON: Hello, everyone. As a reminder,
- the remaining registered speakers are now listed on the
- 13 screen. We invite anyone who is registered to speak
- 14 but has not yet provided their testimony to raise their
- 15 hand at this time. Additionally, if there's anyone who
- did not register to speak but would like to, we also
- encourage that you raise your hand, and we can promote
- 18 you to panelist so you can provide your testimony.
- 19 (No response.)
- MS. THOMPSON: I do not see any new raised hands
- 21 at this time, so we will take another brief pause to
- see if anyone else would like to testify.

```
1
         (No response.)
2
         MR. OLECHIW: So, it is now 4:45, and I would like
 3
    to take one more effort to see if there's anyone that
4
    would still like to speak by raising their hand.
 5
         (No response.)
6
         MR. OLECHIW: Okay. It seems that we have covered
7
    everyone. So, some closing remarks here.
                                                First of
    all, I want to express, on behalf of our office and our
8
    senior EPA leadership, our gratitude for the effort of
10
    so many to participate in this hearing. I also want to
11
    acknowledge my colleagues for serving on this panel and
12
    Abt Associates for their effective and professional
13
    moderation of this hearing. Again, please remember
14
    that we will be accepting written comments through
15
    Monday, September 27th.
16
         With that, I conclude this public hearing. Have a
17
    good evening, everyone, and thank you again.
18
         (Whereupon, at 4:46 p.m., the public hearing was
19
    adjourned.)
20
21
22
```

Reporters Certificate

I, Christine Allen have taken these proceedings and thereafter reduced it to this typewritten transcript under my supervision; that said transcript is a true record of the testimony; that I am neither counsel for, related to, nor employed by any of the partied to the proceeding; and further, that I am not a relative or an employee of any attorney or counsel employed by the parties thereto, or financially or otherwise interested in the outcome of the proceeding, or any action involved therewith.

Witness my signature and seal:

Christine Allen

WORD INDEX
<\$>
\$1.6 141:7 142: <i>18</i>
\$100 218: <i>16</i>
\$113 30: <i>19</i>
\$16 70:5
\$174 84: <i>18</i>
\$2,100 159: <i>16</i>
168: <i>11</i>
\$200 23: <i>13</i>
\$25,000 177:20
\$3 85: <i>15</i>
\$30 23: <i>15</i> 147: <i>10</i>
\$300 24:11
\$330 55:10
\$45,000 177:20
\$5,000 219:5
\$7.4 123:7
\$72 30:18
\$80 75:5 82:18
\$96 82: <i>4</i>
<0> 06 39:4

<1> **1** 2:6 3:1 16:12 78:*18* 91:*13* 145:*1* 152:18 188:20 253:3, 5 **1,000** 41:*11* **1,600** 121:5 **1,754-acre** 193:21 **1.8** 210:17 **10** 49:21 50:14 71:9 73:21 78:8, 9 80:2 92:22 106:22 137:20 157:2, 11 174:22 177:*14* 226:13 250:18 **100** 41:19 43:11 67:2 97:4 206:18 262:8 263:12 **100,000** 219:4 **100-percent** 257:15 **101** 1:21 **108** 91:*13* **10-minute** 272:*17*, 22 273:1, 7 **10-year** 104:*13* **11** 150:4 219:3 237:10 **112** 91:14 **115** 116:2 **116** 91:14 **11th** 92:4

123:*3* **12:30** 133:4, 6, 9 **120** 204:18 **120,000** 258:1 **125** 62:3 **12866** 44:4 **12-year** 254:5 **130** 17:9 97:*13* 265:8 **13990** 9:19 **14037** 12:7 238:18 **15** 25:4 53:19 62:5 150:3 246:15 **150** 258:12 **153** 78:20 239:*13* **15-month-old** 193:6 **15th** 82:5 **15-to-30** 114:*15* **16** 32:4 **161** 239:4, 9 **17** 111:*1* 156:*3* **171** 77:17 18-wheelers 234:2 **1913** 95:2 **1950** 78:*13* **1950s** 203:19 **1956** 197:5 **1960s** 197:15, 21 **1969** 198:*3* **1970** 244:3 **1971** 244:*1* **1988** 284:22 **1990** 96:*13* 1990s 204:8 **1995** 230:19 19th 203:7 1st 48:3 <2> **2** 3:5 4:1 17:7 24:9 26:9 40:9, 15 41:19, 22 42:19 43:3, 22 44:3 51:12 63:3 68:17 69:16, 22 70:4, 8, 11 73:10 74:20 75:9 78:18 91:2, 14 93:2 97:11 116:13 141:9 152:8, 22 154:18 157:9, 12 160:20 168:8, 10 169:10, 21 172:4 192:1 242:18 253:3 264:7 265:9 266:6 **2,000** 276:7 **2,400** 174:*13* **2.5** 158:11 180:7 259:9, 13 **20** 20:11 25:5

194:6 222:8 280:13, 22 285:13 **200** 13:12 **200,000** 95:21 120:14 **2001** 222:*12* **2005** 154:22 222:14 **2006** 39:1 **2008** 34:*3* **2009** 57:11 82:19 239:12 **2010** 41:8 43:7 89:6 175:4 239:17 **2012** 10:8 11:7 50:7 69:13, 18 70:2, 14, 17 89:6 116:13 119:22 145:*1*2 156:2*1* 157:1, 7, 15 158:22 177:19 245:19 261:8, 21 **2013** 85:14 **2014** 82:*1* **2015** 244:19 **2016** 156:22 175:2 222:12 **2017** 264:17 **2018** 43:*17* 123:*13* 255:22 **2019** 43:7 96:13 **2020** 10:5 46:5 62:17 63:7 85:22 92:4 113:13 116:*12* 121:*1* 144:16 156:13, 15 174:18 193:5 239:14 261:10 **2021** 1:10 13:10 38:22 51:2 91:*11* 95:20 110:20 116:15 221:15 224:16 257:7 286:6 **2021-0208** 16:8 136:10 **2022** 41:9 50:22 51:2 70:13 123:4 **2023** 1:5 8:4 10:16 17:5 30:9 50:4 51:13 70:6 71:13 75:1 116:10 130:2 134:4 193:19 198:17 217:17, 19 224:8 229:21 243:10 247:9 264:22 266:1 273:12 286:8

2025 51:*13* 55:*11* 70:13, 17 123:8 147:10 175:3 **2026** 10:17 11:5 17:3, 5, 8 30:9 36:10 51:14 70:7, 22 71:5, 8, 13, 16 75:4 77:15 80:8 94:15 97:12, 17 104:14 112:13 116:10 119:15 126:15 130:2 141:9 151:21 155:1 157:11 160:*15* 188:8 190:9 193:19 194:*15* 198:*17* 217:10 221:15 239:4 264:5, 22 286:8 **2027** 12:*14* 132:2 190:14 217:21 **2030** 12:16 30:4 42:1 55:10 71:2, 5, 11 74:11 83:6, 12 104:15 109:5, 6 119:16 122:14 123:14 130:5 140:9 141:1, 3 142:16 148:22 153:5 154:22 160:21 218:10 238:21 240:11 257:9 260:20 263:13 **2035** 36:15 41:20 43:11 83:11 97:5 109:9 119:13 155:3 206:19 218:*13* 219:2 242:11 257:15 262:9 **2040** 83:9 144:18 **20407** 1:22 **2050** 30:20 41:18 125:15 141:7 142:18 219:3 242:12 **2080** 1:20 20th 203:7 **21** 18:3 69:19 **21st** 166:12 **22** 178:3 224:18 **220** 50:1 212:5 **23** 178:8 202:6 **24** 48:5 198:5 203:5 240-volt 24:10 **246** 202:6 **24-hour** 78:*16*

25 32:6 46:8 69:19 143:15 230:18 **250** 24:7 204:19 **250,000** 264:12 **26** 1:10 46:14 48:8 91:11 93:1 113:17 **27** 13:10 91:11 **27th** 291:15 **28** 91:*11* **28-hour** 204:*15* **29** 96:10 **294-7712** 287:21 <3>**3** 4:8 5:*1* 14:22 85:*3* 91:*14* 136:*14* 264:20 **3,500** 78:19 **3:15** 246:17 247:1, 8 **30** 32:13 39:4 87:17 103:19, 21 119:19 146:12 152:13 **300** 24:8 78:13 81:2 168:13 **307(d** 12:21 **30-minute** 14:21 33-year 42:11 **350** 3:18 236:9 **37,000** 85:20 **38** 38:*15* <4> **4** 5:9 6:1 164:17 239:16 253:5 272:18, 22 273:2, 11 **4.7** 165:*14* **4:45** 288:12, 15 289:7 291:2 **4:46** 291:*18* **40** 55:8, 22 112:2 114:6 122:13 148:21 159:22 **40,000** 112:6 **400** 78:*14* 171:*17* **400,000** 17:8 97:*11* **41** 80:1 116:1 **41st** 137:1 **45** 32:*13* 79:22 169:3 **48** 32:5 **5** 6:7 7:1 187:10 232:15 **5,000** 106:21

96:22 177:13

12 14:21 39:6

110:21 119:14

62:5, 6 71:6

5.9 210:*19*

50 16: <i>19</i> 18:8	9 22:9 26:20 38:1	absent 99:6	165:8 172:14	activities 258:17,
1	58:17 72:3 76:8,	absenteeism 253:3	217:11 242:10	18, 22 259:1
34:8 55:9 71:1,4	1			
122:13 125:10	21 93:17 94:1	absolute 96:14	257:1 264:4	acute 242:5
140:9 141:1	102:11 122:1	Absolutely 25:9, 14	achieved 41:17	acutely 268:11
148:21 154:20	128:16 129:5	63:14 141:3	63:15 119:21	adapt 95:7 172:7
169: <i>3</i> 177:2 <i>1</i>	132:13 135:19	191: <i>16</i>	157:15	added 51:3 212:18
218:9 238:20	164:11 173:2	Abt 8:7, 16 14:11	achievements 91:6	adding 39:18
500 39:4 137:21	182: <i>3</i> 184: <i>12</i>	134:7 247:7	achieves 158:20	285:11
501(c)(3 209:19	205:18 216:18	248:16 273:10	Achieving 56:2	addition 41:21
50s 197:9	227:4 232:6 248:2	291:12	57:14 85:6 88:16	56: <i>15</i> 131: <i>11</i>
52 154:20	249:3, 18 252:5	abundant 64:9	105:22 117:18	150:7 154:6
52-mile-per-gallon	254:19 263:1	83:3	122:13 160:9	177:22
77:17	266:16 287:12	abuse 35:11	163:14	additional 16:6
53 78:22	9:30 1:9	academic 35:13	acidifying 282:16	23:14 50:15 71:9
54 121:2 174:2 <i>1</i>	90 169: <i>15</i>	Academy 16:18	acknowledge 61:18	74:13 114:9 136:8
55 39:6	90,000 214:20	accelerate 66:17,	64: <i>14</i> 238: <i>10</i>	169:19 186:17
56 175:15	907,000 125:9	21 123:15 154:3	291:11	255:17 265:8
	/			l .
57 34:9 175:6	90s 123:12	254:9 264: <i>13</i> 266: <i>10</i>	acknowledgement 49:15	Additionally 42:19 158:1 287:12
581 212:5, 21	91 176:8	1		
213:22	919 287:20	accelerated 34:8	acknowledging	288:21 289:14
	919-294 184: <i>4</i>	accelerating 188:10	252:20 284:13	290:2, 15
<6>	220:17 269:20	acceleration 78:15	ACOSTA 4:10	address 9:12
6 180:5	919-294-7712	accept 15:13 26:4	121:18	27:21 31:9 48:21
6.5 119:4	15:2 <i>1</i> 16: <i>1</i> 37: <i>14</i> ,	37:6 58:7 75:20	Act 10:14 12:11,	51:20 57:20 92:9
60 24:18 74:11	17 58:20 59:1	97:8 102: <i>1</i> 128: <i>6</i>	21 41:14 44:22	100:2, 10 112:7, 17
83:7, 12 91:21	76: <i>11</i> , <i>14</i> 102: <i>14</i>	135:9 164: <i>1</i>	63:3 65:19 66:6	124:8 131:9, 2 <i>1</i>
109:4 111:22	128:19, 22 135:22	179: <i>15</i> 182: <i>19</i>	117:12 158:17	144:8 148:6 158: <i>3</i>
119:15 141:2	136: <i>3</i> 164: <i>14</i> , <i>16</i>	183: <i>1</i> 2 186: <i>1</i>	163:7 167: <i>3</i> 180: <i>6</i>	163: <i>1</i> 166: <i>1</i> 179: <i>7</i>
142:16 153:4	183:20 184: <i>1</i>	205:8 206:4	203:17 212:16	195:12 215:21
160:14	205:21 206:2	211:16 231:18	219:10 233:15	216:7 228:22
62 176:9	232:9, 12 248:5, 7	235:20 237:19	235:2, 9 244:3	254:4 260:15
650,000 84: <i>17</i>	272:12 289:3	247:15 270:4	acting 95:12	281:10 284:19
67,000 184:22	92 194:4	acceptable 28:18	112:8 241:10	addressed 207:1
68 175:14	98 174:22	acceptance 124:2	action 10:5 20:4	addressing 30:12
00 173.14	99 54:19	accepting 291:14	26:7 27:21 31:8	55:2 96:6 117:5
<7>	39 34.19			142:3 158:14
		access 9:16 19:8	35:3, 20, 21 36:8	
70 31: <i>1</i>	<a>	87:22 114:4	46:5, 16 48:7	161:15 198:19
71 175:6, 13	a.m 1:9	140:14 216:3	59:17 61:10 62:19	207:21 243:10
73 175:5 212:7, 12	abandoning 46:10	226:1 275:19	81:5 90:22 92:11	286:4
75 32:6 74:15	ability 148:19	accessible 125:13	118:20 144:17	adds 86:14
140:11 250:15	169:20 183:3	accident 120:17	151: <i>12</i> 152: <i>16</i>	adept 172:5
76 176:8	220:8 236:1	accommodations	166: <i>11</i> 174: <i>17</i>	adequately 48:22
77 125: <i>11</i>	237:21 260:10	14:20	190:4, 7 211:7	49:6 169:4
7712 184:5 220:18	266:19	accompanied 88:14	226:8 228:22	adjacent 212:4
269:21	able 15:14 20:17	accomplished 50:16	237:12 253:22	adjourned 291:19
78 174: <i>18</i> 176: <i>7</i>	34:16, 17 37:7	accord 107:5	254:4 278:5	adjustment 272:21
7th 1:21	58:8 65:7 75:21	account 49:8	284:19	adjustments 14:19
	100:13 102:2	148:2 <i>1</i> 176:2 <i>1</i>	actions 27:17	administering 8:17
< 8 >	120:14 128:7	accounts 87:17	56:18 122:21	Administration
8 184: <i>14</i>	135:9 137:21	96:10 233:20	124:7 284:15	9:12 10:6 11:20
8,000 110: <i>12</i>	141:15, 16 164:2	264:18	active 111:4	12:3 27:14, 18
80 156:5	183:4, 13 185:11	accurate 174:10	167:21 169:6	31:7 51:9 65:16
800,000 54:7	186:7 190: <i>1</i>	accurately 16:11	202:6 227:19	68:1 69:14 74:8
81,000 97: <i>18</i>	197:11 200:12	136: <i>13</i>	250:5	84:11 89:14 92:17,
84 54:3 175:14	205:9 211:17	accusatory 239:22	actively 168:14	20 95:14, 18 105:3
1		achievable 157:2	285:20	l .
282:14	225:22 230:7			106:1 112:9
85 250:19	231:19 238:1	achieve 11:13	activism 191:21	116:16 119:9
86 175:5	240:18 241:1, 2	52:2 70:9 85:10	activist 41:6	140:18, 22 142:1,
	247:16 256:12	90:6 105:13 132:4	208:12	13 152:18 154:15
<9>	268:7	145:6 148:12, 15	activists 69:5	156: <i>14</i> 160: <i>16</i>
		157:13 160:12	180: <i>1</i>	163:13 175:22
1				

206:16 211:9
217:7 224:5 225:4
231:10 239:5
231: <i>10</i> 239: <i>5</i> 241: <i>10</i> 242: <i>20</i>
244:18 252:20
254:1, 6 257:2
261:12, 18 263:18
266:10 278:18
284:13, 16
Administration's
20:4 22:22 25:10
30:12 55:1 59:17
61: <i>12</i> 86: <i>19</i> 90: <i>22</i> 113: <i>15</i> 122: <i>12</i> 125: <i>14</i> 130: <i>4</i>
113: <i>15</i> 122: <i>12</i>
125: <i>14</i> 130: <i>4</i>
140: <i>12</i> , <i>16</i> 146:20
149:20 152:15
160: <i>10</i> 193: <i>16</i>
215:19 221:14
245: <i>13</i> 286: <i>4</i>
Administrative
65:19 103:8
Administrator 2:2
12:8
adopt 20:5 23:2 43:3, 21 59:18
91:2 92:22 93:4, 9 97: <i>15</i> 113: <i>16</i>
218:6 222:2
226:11 262:15
267:8 269:10
adopted 65:16
70: <i>11</i>
adopter 20:10
Adopting 96:4
adoption 66:22
67:9 159: <i>13</i>
257:14
adrift 46: <i>11</i>
adults 32:4 35:16
73:21 100:19
150: <i>4</i> 253: <i>1</i> , 5
advance 79:9 96:6
127:18, 20 131:18
157:3 279:2, 12
advanced 50:11
70:12, 15 85:1
126:5 127:1, 6, 18
131: <i>4</i> 148: <i>1</i> , <i>6</i>
266:3
advancements
103:12
advances 95:8
126:8
advancing 31:2
116:5 279:18
advantage 25:12
40:11 84:15
130:22
130:22

advised 258:14
Advisor 87:7
Advisorv 98:9
advocacy 45:2
46:7
advocate 44:14
45:8 105: <i>11</i>
152: <i>10</i> 211:2 <i>1</i>
213:11 274:9
285:19
advocates 174:10 advocating 107:4
advocating 10/:4
111:5 263: <i>12</i> affairs 53: <i>11</i>
122:9 152: <i>10</i>
155:19
affiliated 284:3
affiliates 119:3
affiliation 14:6
16:15 19:17 22:15
27:4 31:20 33:20
38:8 40:22 44:9
48:14 52:6 54:13
59.9 60:12 65:3
38:8 40:22 44:9 48:14 52:6 54:13 59:9 60:12 65:3 68:20 72:9 77:4
80:20 84:2 87:4
90:14 94:8 98:4
102:18 106:12
110:5 113:2
115:13 118:10
122.6 125.3
129:16 136:17 139:22 142:22 146:8 149:9 152:5 155:15 159:6 161:5 164:20 167:16 170:5 177:10 179:13
139:22 142:22
146:8 149:9 152:5
155: <i>15</i> 159: <i>6</i>
161:5 164:20
167: <i>16</i> 170: <i>5</i>
177:10 179:13
182:18 184:17
187:15 190:20
192:2 <i>1</i> 196:8
200:4 201:10
206:6 209:10
211:19 214:13
217:1 220:9 221:2
223:18 227:11 232:19 236:4
232:19 236:4
238:3 241:4 243:5
249:22 252:9
255:2 257:19
263:6 266:20
270:6 273:20
274:2 277:3 280:1,
3 283:21
afford 21:9 89:15
142:10 192:11
207:9 268:16
269:14
affordability 85:8
affordable 56:9 86:16 125:13
00.10 123.13

130:13 132:5 168:*16* 176:*1* **afforded** 141:11 **afraid** 104:19 225:21 236:18 **Africa** 104:8 African 98:7 99:20 100:15 208:11 AFTERNOON 4:7 14:22 134:1, 2 146:9 155:*17* 184:18 227:14 233:7 243:7 246:20 277:4 284:1, 2 afternoon's 134:21 **age** 198:4 256:13 **Agencies** 4:6 9:14, 20 44:4 57:10 115:20 116:1, 2, 5 117:3, 16 123:1 176:*18* **AGENCY** 1:2 2:1 8:12 12:9 49:3, 12 50:7, 9 65:14 66:9, 16, 20 68:3 69:11 103:7 116:*11* 140:20 155:20 157:16 181:11 204:22 250:9, 20 251:11 264:9 285:9 **Agency's** 8:3 49:2 50:4 134:3 **agenda** 257:2 aggressive 85:10 124:4 163:15 186:6 251:6 269:12 aggressively 167:3 **ago** 35:2 45:3 51:16 81:16 98:21 108:14 137:11, 20 141:14 145:12 228:8, 10 229:9 agree 68:4 73:21 130:3 180:14 195:*1* **agreed** 82:19 141:13 145:12 Agreement 41:21 45:3 46:10, 13 146:17 244:19 Agreements 49:6 agricultural 260:9 agriculture 260:8 **AHC-10** 16:20 ahead 50:20 85:4 118:15 247:5

249:5 261:4 **aiming** 104:14 aims 88:16 **Air** 2:3, 5 3:19 4:3, 4, 5, 22 5:5, 10 6:8, 9, 12 8:12, 19 9:2, 17 10:14 12:11, 21 18:8 19:11 28:4 29:7, 12 30:16, 20 33:5, 7, 11, 12 34:9, 11, 12, 15, 18 36:4, 5, 20, 22 42:6, 16, 18 45:2, 11, 13, 16 61:9 63:3, 4 69:7 72:21 74:2, 8 75:3, 7 79:12 92:4 94:11, 17 95:20 97:18 98:16, 18 99:3, 4, 16 100:18, *21* 108:2 110:9, *10*, 13, 21 111:3, 12, 18, *21* 112:*1*, *3*, *17*, *19* 113:8, 14, 19, 20 114:4, 9 115:3, 5, 16, 20 116:1, 2, 4, 6 117:4, 5, 12, 16 123:17 131:10, 18 137:19 147:22 149:*12*, *17* 150:*13*, 22 153:16 155:19, 21 156:4, 6 158:4, 10, 13, 14, 15, 17 162:1, 10 163:15 165:19 169:14 171:3, 17 174:2, 17, 20 176:11 180:5, 8 181:15 184:20 185:2, 5 186:2 187:17, 19, 20 189:7, 8, 9, 11, 12, 17, 19 193:3, 13 194:20, 21 195:5 196:13, 22 198:8, 9, 12, 21 199:7, 10, 12, *16* 201:*13* 208:*3* 210:8 211:21 212:15, 18 213:1, 8, 11 214:8, 16, 21, 22 215:1 217:12 223:9, 11 228:3, 4 231:6 240:16 241:9, 22 243:22 244:2, 5, 8 245:1, 2, 8, 14 253:10, 21 256:4, 19 258:5, 10 262:10 267:7, 9, 10, 17, 18, 20 269:1 274:11, 13 275:4, 13, 20 281:2, 3, 5

284:18 286:20 airbags 204:7 airport 24:16, 17, 21 114:17 air-related 166:2 **alarm** 92:13 191:12 **alarmed** 256:11 alarming 224:8 ALEJANDRA 2:2 alerts 34:9 45:14 72:20 **ALICE** 6:15 216:21, 22 217:2 **align** 70:13 aligned 55:1 84:16 124:13 **alignment** 57:7, 11 alive 44:21 all-electric 28:20 40:5 67:20 68:5 223:2 **ALLEN** 2:10 22:14, 17, 19 95:1 allergy 27:7 **Alliance** 2:7, 22 3:14 5:18 16:17 54:16 87:7, 8 88:21 252:13 255:6 allow 15:15 29:17 37:8 58:9 67:15, 18 75:22 97:8 102:3 113:15 126:5, 13 128:8 135:11 145:7 164:3 165:9 183:14 193:10 205:10 207:8 221:21 225:7 231:20 247:17 allowed 14:3 234:10 239:3 **allowing** 14:*15* 52:12 60:4 75:12 77:8 81:6 98:16 115:7, 10 119:9 130:21 254:11 279:17 allows 63:12 193:13 270:19 all-wheel 23:11, 12 ally 238:9 alongside 139:10 Alternative 17:7, 12 19:2 20:6 21:19, 22 23:2 26:9 41:19, 22 42:19 43:3, 22 44:3, 5 51:12 59:19 69:22 70:4,

8, 11 73:10 74:20
75:9 91:2 93:2
97: <i>11</i> 131: <i>11</i>
140: <i>10</i> 141:9
152:21 154:18
157:9, 12 159:14,
15 160:20 168:7, 10 169:10, 21
172:4 177:14
192:1 222:3
226:12 238:22
239:2 242:18
264:7 265:9 266:6
269:10
alternatives 207:10 Aluminum 3:12
84:7, 9, 16, 21 85:5,
10, 11, 14, 16, 20
86:2, 10, 13, 14, 18
aluminum-intensive
86:5
aluminum's 86:6
Alzheimer's 18:4 Amalgation 146:11
amazing 209:15
amazingly 222:16
Amazon 178:12
Amazon 178: <i>12</i> ambient 117: <i>4</i>
244:5
ambition 218:19
ambitious 36:10
89: <i>19</i> 95: <i>12</i> 112: <i>14</i> 126: <i>17</i>
130:3 148:11, 16
152:1 190:10, 13
194:16 257:6
194: <i>16</i> 257:6 266: <i>4</i> 278:20
279:9
ambivalent 105:5 ambulance 161:20
AMEN 6:21 80:14
amendments 244:3
America 3:4 4:11
47:4 65:12 79:18
104: <i>10</i> 105: <i>17</i>
108:15 122:9
147:7 180:11
198:22 207:5 238: <i>18</i>
American 21:10
27:8, 10 31:1
27:8, 10 31:1 32:12, 14 36:18
41:3 42:20 44:18,
21 77:9 80:11
95:19 98:7 99:20
100: <i>16</i> 110: <i>20</i> 113: <i>13</i> 126: <i>22</i>
113: <i>13</i> 126: <i>22</i> 138:9 146: <i>16</i>
147:12 163:9
169: <i>16</i> 174: <i>5</i> , <i>14</i>
175:13 199:20

,
204:18 208:11 218:18, 20 242:1 259:10 264:12 Americans 11:14 46:9 48:1 68:12 69:6 85:22 86:16 196:18 199:11 277:19 279:13 America's 87:8 190:15 216:10 Ames 226:22 amount 82:2 95:19 181:3 269:4 275:12 amounts 151:2 amplifies 256:18 analysis 63:7 64:12 68:3 70:4 71:2 74:17 140:7 264:18 265:7 Analyst 48:17
analyzed 152:22 264:10
analyzing 253:12 ancestral 228:12,
anchor 88:4 and/or 117:18 ANDERSON 4:19 Angeles 155:21 196:22
angers 105:7 animal 201:17 203:3, 16
animals 203:4, 5, 13 204:16 ANN 2:11 3:2 26:15 59:2, 4, 14
announced 12:3 42:3 81:8 123:7, 13
announcement 74:9 123:2 288:5 annual 11:3 annually 30:20 62:4
answer 26:11 Antarctic 104:7 ANTHONY 5:7 159:5, 8
anthropologist 227:20 anticipates 57:20 anxiety 18:14 23:7 24:1, 2, 15 25:6, 7, 9 35:10 anxious 42:13 APA 66:2 apart 50:17
apartment 189:18 Apologies 272:5

apparent 49: <i>1</i> 188: <i>17</i>
appearing 182:6 appears 99:21 248:20
appetite 157:4 applaud 90:22 146:20 156:12
applauding 65: <i>14</i> appliances 114: <i>3</i>
applicable 12: <i>10</i> 67: <i>11</i>
applications 123:17, 18
applications 123:17, 18 applied 59:22 203:20 270:21 271:3
applies 287:2 apply 10: <i>16</i> 13:20 169: <i>10</i> 172:6
217:16
applying 60:1 appreciate 13:5
14:14 19:19 22:1 65:13 75:15 77:7 106:8 107:8 109:19 118:5 122:10 124:15
134: <i>15</i> 138: <i>3</i>
148:3 149:1 152:15 168:2 214:2 238:13
241: <i>10</i> 246: <i>21</i> 285: <i>6</i>
appreciates 69:8 86:18 132:22 appreciative 284:8
approach 21:6
66:4, 10, 12 86:19 126:4 190:6
appropriate 12:9 64:1 124:6 271:4 272:21
appropriately 118: <i>1</i>
approved 82:5 approximate 157: <i>14</i>
approximately
24:7 62:3 141:6 April 10:5 178:6 AQMD 158:1, 12
Arapahoe 238:12 archaic 207:14
area 32:9 34:4 42:7 72:16, 18, 19,
20 137:3 155:22 197:10, 22 215:4 236:9 283:8
areas 113:22 117:1 124:21

162: <i>3</i> 165: <i>15</i>
260:4 274:22
275:4
Argonne 213:14
arguments 52:16
1510
174:8 Arizona 214:19
aromatic 63:19
Arometics 64:5 11
Aromatics 64:5, 11 arranging 77:7
arranging //./
arrived 25:2 177:5 arsenal 80:9
artificially 265:10
Asian 41:3 259:9
aside 18:20 150:22
asked 10:4 21:4
63:8 176:4
asking 40: <i>12</i> , <i>16</i> 83: <i>6</i> 101: <i>14</i>
131:16 237:14
285:8
aspects 55:19
aspects 33.19
aspirational 104:20 aspirations 55:8
160: <i>11</i>
assembly 89:10
assess 124:12
assessed 10:9
assessing 40:4
Assessment 42:3
86:2 <i>1</i>
assigned 174:19
assist 125:20
158:17
Assistant 2:2
155:18
Associate 140:5
associated 113:12
125:17
Associates 8:7, 16
14:11 134:7
139:11 247:7
273:10 291:12
Association 4:5, 13,
16 6:14 27:9, 10
30:22 32:12 84:8
113:13 115:20
113: <i>13</i> 115:20 116: <i>1</i> 125:6 129: <i>19</i> 242: <i>1</i>
129:19 242:1
263:9, 11
Association's 3:12
30:15 95:20
30.13 33.20
110:20 assure 240:1
110:20 assure 240:1
110:20 assure 240:1 asthma 18:5, 6
110:20 assure 240:1 asthma 18:5, 6 27:7 32:17 34:14
110:20 assure 240:1 asthma 18:5, 6 27:7 32:17 34:14 45:10 82:9 95:22 96:1, 19 98:16, 19.
110:20 assure 240:1 asthma 18:5, 6 27:7 32:17 34:14 45:10 82:9 95:22 96:1, 19 98:16, 19.
110:20 assure 240:1 asthma 18:5, 6 27:7 32:17 34:14 45:10 82:9 95:22

<i>15</i> , <i>21</i> 154: <i>14</i>
162:3, 6 163:6
181:9 189:7
181.9 189.7
196: <i>16</i> 208: <i>5</i>
210:10 215:10
216:6 242:4, 5
245.4.0.252.15
245: <i>4</i> , 9 252: <i>15</i>
253:1, 4, 5, 8, 12
254:6 258:19
254:6 258:19 267:15 274:19
207.13 274.19
283:4
asthma-related
253: <i>13</i>
asthmatic 108:1
198:2
astronomical 162:5
224: <i>14</i>
athletic 215:14
Atlanta 45:14
Atlantic 27:11
235:3
atmosphere 78:12
191: <i>18</i> 192: <i>6</i>
282:1, 3
atmospheric 280:4,
10, 13
attachment 35:10
attack 98:21 112:2
attacks 96:19
112.1 242.5
112: <i>1</i> 242: <i>5</i>
attainability 260:21
attainability 260:21 attaining 117:3
attainability 260:21 attaining 117:3 attainment 34:4
attainability 260:21 attaining 117:3 attainment 34:4 72:20 158:17
attainability 260:21 attaining 117:3 attainment 34:4 72:20 158:17
attainability 260:21 attaining 117:3 attainment 34:4 72:20 158:17 165:15
attainability 260:21 attaining 117:3 attainment 34:4 72:20 158:17 165:15 attend 170:2
attainability 260:21 attaining 117:3 attainment 34:4 72:20 158:17 165:15 attend 170:2 attendance 59:4
attainability 260:21 attaining 117:3 attainment 34:4 72:20 158:17 165:15 attend 170:2 attendance 59:4 100:22
attainability 260:21 attaining 117:3 attainment 34:4 72:20 158:17 165:15 attend 170:2 attendance 59:4 100:22
attainability 260:21 attaining 117:3 attainment 34:4 72:20 158:17 165:15 attend 170:2 attendance 59:4 100:22 attendee 173:5
attainability 260:21 attaining 117:3 attainment 34:4 72:20 158:17 165:15 attend 170:2 attendance 59:4 100:22 attendee 173:5 196:1 219:17
attainability 260:21 attaining 117:3 attainment 34:4 72:20 158:17 165:15 attend 170:2 attendance 59:4 100:22 attendee 173:5 196:1 219:17 248:21 249:8
attainability 260:21 attaining 117:3 attainment 34:4 72:20 158:17 165:15 attend 170:2 attendance 59:4 100:22 attendee 173:5 196:1 219:17 248:21 249:8 attendees 15:9
attainability 260:21 attaining 117:3 attainment 34:4 72:20 158:17 165:15 attend 170:2 attendance 59:4 100:22 attendee 173:5 196:1 219:17 248:21 249:8 attendees 15:9
attainability 260:21 attaining 117:3 attainment 34:4 72:20 158:17 165:15 attend 170:2 attendance 59:4 100:22 attendee 173:5 196:1 219:17 248:21 249:8 attendees 15:9 22:5 26:17 37:20
attainability 260:21 attaining 117:3 attainment 34:4 72:20 158:17 165:15 attend 170:2 attendance 59:4 100:22 attendee 173:5 196:1 219:17 248:21 249:8 attendees 15:9 22:5 26:17 37:20 59:4 71:21 76:19
attainability 260:21 attaining 117:3 attainment 34:4 72:20 158:17 165:15 attend 170:2 attendance 59:4 100:22 attendee 173:5 196:1 219:17 248:21 249:8 attendees 15:9 22:5 26:17 37:20 59:4 71:21 76:19
attainability 260:21 attaining 117:3 attainment 34:4 72:20 158:17 165:15 attend 170:2 attendance 59:4 100:22 attendee 173:5 196:1 219:17 248:21 249:8 attendees 15:9 22:5 26:17 37:20 59:4 71:21 76:19
attainability 260:21 attaining 117:3 attainment 34:4 72:20 158:17 165:15 attend 170:2 attendance 59:4 100:22 attendee 173:5 196:1 219:17 248:21 249:8 attendees 15:9 22:5 26:17 37:20 59:4 71:21 76:19
attainability 260:21 attaining 117:3 attainment 34:4 72:20 158:17 165:15 attend 170:2 attendance 59:4 100:22 attendee 173:5 196:1 219:17 248:21 249:8 attendees 15:9 22:5 26:17 37:20 59:4 71:21 76:19
attainability 260:21 attaining 117:3 attainment 34:4 72:20 158:17 165:15 attend 170:2 attendance 59:4 100:22 attendee 173:5 196:1 219:17 248:21 249:8 attendees 15:9 22:5 26:17 37:20 59:4 71:21 76:19 93:14, 22 121:20 129:3, 9 135:4 139:15 155:8 170:20 181:22
attainability 260:21 attaining 117:3 attainment 34:4 72:20 158:17 165:15 attend 170:2 attendance 59:4 100:22 attendee 173:5 196:1 219:17 248:21 249:8 attendees 15:9 22:5 26:17 37:20 59:4 71:21 76:19 93:14, 22 121:20 129:3, 9 135:4 139:15 155:8 172:20 181:22 182:6 187:5
attainability 260:21 attaining 117:3 attainment 34:4 72:20 158:17 165:15 attend 170:2 attendance 59:4 100:22 attendee 173:5 196:1 219:17 248:21 249:8 attendees 15:9 22:5 26:17 37:20 59:4 71:21 76:19 93:14, 22 121:20 129:3, 9 135:4 139:15 155:8 172:20 181:22 182:6 187:5 216:14 219:22
attainability 260:21 attaining 117:3 attainment 34:4 72:20 158:17 165:15 attend 170:2 attendance 59:4 100:22 attendee 173:5 196:1 219:17 248:21 249:8 attendees 15:9 22:5 26:17 37:20 59:4 71:21 76:19 93:14, 22 121:20 129:3, 9 135:4 139:15 155:8 172:20 181:22 182:6 187:5 216:14 219:22 227:1 249:14
attainability 260:21 attaining 117:3 attainment 34:4 72:20 158:17 165:15 attend 170:2 attendance 59:4 100:22 attendee 173:5 196:1 219:17 248:21 249:8 attendees 15:9 22:5 26:17 37:20 59:4 71:21 76:19 93:14, 22 121:20 129:3, 9 135:4 139:15 155:8 172:20 181:22 182:6 187:5 216:14 219:22 227:1 249:14
attainability 260:21 attaining 117:3 attainment 34:4 72:20 158:17 165:15 attend 170:2 attendance 59:4 100:22 attendee 173:5 196:1 219:17 248:21 249:8 attendees 15:9 22:5 26:17 37:20 59:4 71:21 76:19 93:14, 22 121:20 129:3, 9 135:4 139:15 155:8 172:20 181:22 182:6 187:5 216:14 219:22 227:1 249:14 252:1 254:15
attainability 260:21 attaining 117:3 attainment 34:4 72:20 158:17 165:15 attend 170:2 attendance 59:4 100:22 attendee 173:5 196:1 219:17 248:21 249:8 attendees 15:9 22:5 26:17 37:20 59:4 71:21 76:19 93:14, 22 121:20 129:3, 9 135:4 139:15 155:8 172:20 181:22 182:6 187:5 216:14 219:22 227:1 249:14 252:1 254:15 262:19
attainability 260:21 attaining 117:3 attainment 34:4 72:20 158:17 165:15 attend 170:2 attendance 59:4 100:22 attendee 173:5 196:1 219:17 248:21 249:8 attendees 15:9 22:5 26:17 37:20 59:4 71:21 76:19 93:14, 22 121:20 129:3, 9 135:4 139:15 155:8 172:20 181:22 182:6 187:5 216:14 219:22 227:1 249:14 252:1 254:15 262:19 attention 22:1
attainability 260:21 attaining 117:3 attainment 34:4 72:20 158:17 165:15 attend 170:2 attendance 59:4 100:22 attendee 173:5 196:1 219:17 248:21 249:8 attendees 15:9 22:5 26:17 37:20 59:4 71:21 76:19 93:14, 22 121:20 129:3, 9 135:4 139:15 155:8 172:20 181:22 182:6 187:5 216:14 219:22 227:1 249:14 252:1 254:15 262:19 attention 22:1
attainability 260:21 attaining 117:3 attainment 34:4 72:20 158:17 165:15 attend 170:2 attendance 59:4 100:22 attendee 173:5 196:1 219:17 248:21 249:8 attendees 15:9 22:5 26:17 37:20 59:4 71:21 76:19 93:14, 22 121:20 129:3, 9 135:4 139:15 155:8 172:20 181:22 182:6 187:5 216:14 219:22 227:1 249:14 252:1 254:15 262:19 attention 22:1 92:10 104:19
attainability 260:21 attaining 117:3 attainment 34:4 72:20 158:17 165:15 attend 170:2 attendance 59:4 100:22 attendee 173:5 196:1 219:17 248:21 249:8 attendees 15:9 22:5 26:17 37:20 59:4 71:21 76:19 93:14, 22 121:20 129:3, 9 135:4 139:15 155:8 172:20 181:22 182:6 187:5 216:14 219:22 227:1 249:14 252:1 254:15 262:19 attention 22:1 92:10 104:19 105:8 106:8
attainability 260:21 attaining 117:3 attainment 34:4 72:20 158:17 165:15 attend 170:2 attendance 59:4 100:22 attendee 173:5 196:1 219:17 248:21 249:8 attendees 15:9 22:5 26:17 37:20 59:4 71:21 76:19 93:14, 22 121:20 129:3, 9 135:4 139:15 155:8 172:20 181:22 182:6 187:5 216:14 219:22 227:1 249:14 252:1 254:15 262:19 attention 22:1 92:10 104:19 105:8 106:8 attitude 105:5
attainability 260:21 attaining 117:3 attainment 34:4 72:20 158:17 165:15 attend 170:2 attendance 59:4 100:22 attendee 173:5 196:1 219:17 248:21 249:8 attendees 15:9 22:5 26:17 37:20 59:4 71:21 76:19 93:14, 22 121:20 129:3, 9 135:4 139:15 155:8 172:20 181:22 182:6 187:5 216:14 219:22 227:1 249:14 252:1 254:15 262:19 attention 22:1 92:10 104:19 105:8 106:8 attitude 105:5 attorney 22:20
attainability 260:21 attaining 117:3 attainment 34:4 72:20 158:17 165:15 attend 170:2 attendance 59:4 100:22 attendee 173:5 196:1 219:17 248:21 249:8 attendees 15:9 22:5 26:17 37:20 59:4 71:21 76:19 93:14, 22 121:20 129:3, 9 135:4 139:15 155:8 172:20 181:22 182:6 187:5 216:14 219:22 227:1 249:14 252:1 254:15 262:19 attention 22:1 92:10 104:19 105:8 106:8 attitude 105:5 attorney 22:20
attainability 260:21 attaining 117:3 attainment 34:4 72:20 158:17 165:15 attend 170:2 attendance 59:4 100:22 attendee 173:5 196:1 219:17 248:21 249:8 attendees 15:9 22:5 26:17 37:20 59:4 71:21 76:19 93:14, 22 121:20 129:3, 9 135:4 139:15 155:8 172:20 181:22 182:6 187:5 216:14 219:22 227:1 249:14 252:1 254:15 262:19 attention 22:1 92:10 104:19 105:8 106:8 attitude 105:5

August 1:10 42:2 189:4 Austin 72:14 73:6 161:21 authority 10:14 51:*1* 117:*11* authorized 13:21 **autism** 18:5 **auto** 10:11 11:1, 8 43:1 55:5, 6, 13, 18 57:11 63:16 88:3 89:4, 19 90:7 105:12 139:1, 3 140:19 145:7, 11 159:17 160:5 165:9 198:11, 14 199:1 204:8 218:19 222:9 244:5 264:1 265:12 268:17 286:12 AutoInnovators 54:17, 18, 22 55:13 57:19 automaker 26:5 146:16 218:15 automakers 17:13 20:8 29:14, 18 36:12, 17 44:1 54:18 56:16 57:16 59:21 62:14 63:12 66:19 67:15 71:10 73:20, 22 74:21 78:3, 8 82:17, 18 86:6 95:11 97:9 104:20 112:14 123:1 131:6 141:11, 13 151:22 160:*11* 161:*1* 168:4, 9 170:10 190:10 194:15 221:21 222:4, 20, 22 225:7 226:15 242:16 245:20 264:16 265:16 automatically 15:10 135:5 Automobile 113:11 170:16 171:3 172:4 automobiles 55:6 73:12 74:14 171:1 Automotive 2:22 28:9 54:16 71:2 77:9 84:6 85:9, 12 86:14 94:22 95:8 100:*3* 136:2*1* 137:7 138:14, 22 157:2 166:4 autos 282:9

autoworkers 95:6 218:20 availability 122:19 available 10:21 13:15 19:2 28:21 31:7 33:11 46:4 50:19 115:6 130:8 232:14 270:14 288:9 avalanche 17:20 average 32:9 57:8, 22 62:6 78:20 83:8 159:16 168:11 194:4 228:6 245:10 260:3 avert 52:17 **avid** 115:1 avoid 41:14 44:1 93:8 104:10 168:6 178:7 213:8 225:7 258:15 avoidable 213:17 **avoiding** 112:13 151:21 190:9 194:15 **aware** 11:15 202:9 203:10 251:2 awareness 170:22 aways 245:20 axels 271:4 < B > **BABBIDGE** 4:5 **Babbige** 115:12, 15, **babies** 195:2 back 11:2 45:15 51:17 69:9 75:4 88:18 89:9 92:20 95:1, 11 99:15 134:2 137:6 140:8 148:9 156:13 192:19 206:16 218:8 220:20 238:14 240:9 242:22 244:18 247:5 261:16 268:11 272:18, 22 273:2 274:19 background 45:7 170:15 185:3 backgrounds 90:8

backs 241:17

bad 103:14

197:8

180:10 189:1

backwards 78:15

BAIER 3:2 59:2,

10, 12, 14 **bailed** 241:19 **bailing** 51:11 **bailout** 82:18 baked 255:14 **BAKKER** 4:11 122:5, 8 balanced 124:7 174:11 balancing 106:6 **ball** 282:13 **bank** 86:8 **barons** 203:8 barriers 132:2 251:3 **based** 116:7 126:5 258:14 baseline 86:12 260:16 264:17 basements 82:4 **basic** 33:11 **Basin** 158:10 **basis** 130:*13* 170:18 209:22 **batch** 246:22 Bateman 22:20 **batteries** 281:14, 16, 17, 21 **battery** 20:20 55:16 120:18 123:5, 9 124:3 270:20, 22 battling 95:22 **batty** 53:8 Bay 236:9 **beach** 197:10 255:20 256:5 bear 32:19 105:8 109:15 **beat** 78:17 **beat-up** 20:11 beautiful 113:9 191:9 becoming 53:16 108:10 186:9, 13 BEDNAR 6:4 182:11 200:3, 6 began 81:15 123:12 198:1 beginning 12:11, 14 33:6 72:21 235:7 260:14 begins 51:5 66:9 **behalf** 2:1 8:11 69:4 84:7 97:18 109:17 115:19 119:2 152:12 211:12 236:8 238:6 243:8 263:10 269:14

277:10 291:8 behavior 35:13 **Beitzel** 227:9, 15 **belabor** 48:19 belief 33:9, 10 138:*11* believe 25:10 51:1 53:13 59:22 68:11 73:8 84:13 147:2 156:20 176:17 177:16 178:8, 20, 21 191:13 193:8 235:2 **believes** 70:11 244:7 believing 44:18 **belong** 238:10 belongs 282:11 benchmark 278:12 **Bend** 170:11 171:20 beneficiary 105:19 benefit 68:9, 12 88:10 109:1, 2 141:5 142:10 157:7 212:18 242:16 276:8 278:2 benefited 28:7 benefits 11:14 29:19 30:19 43:19 44:5 61:20 63:1 64:2 68:8 70:5 83:20 105:13 108:7 117:2 120:*I*, 3 130:22 140:11 147:20 158:20 204:16 234:19 243:19 266:11 benevolent 170:17 bent 229:6 benzene 64:5 Berkeley 267:5 **Berle** 32:8 best 9:15 34:5 71:15 105:4 121:8 170:18 193:8, 14 194:17 199:16 207:17 208:22 Beta 98:10 betraved 53:21 **Better** 6:16 17:16 63:12 68:13 73:3 75:11 100:18, 21, 22 107:22 108:1, 7 109:10 149:3 169:14, 21 193:13 197:10 198:10 204:2 222:11 223:6, 11 242:18

279:3, 6 284:7 287:1 **Bevond** 6:11 30:10 67:22 82:5 91:20 119:8 126:15 132:2 180:16 190:14 191:12 209:19 211:12 217:10 286:9 **Biden** 9:10 27:14 30:6 31:6 41:21 46:13 48:9 71:1 81:8 84:11 90:22 95:14 105:3 112:7 116:16 140:22 142:1, 12 146:20 152:15 201:5 206:17 216:7 252:20 257:2, 11 266:10 284:12 **Biden's** 9:19 27:20 42:20 46:20 51:18 71:11 148:11 168:2 218:11 254:4 284:19 big 185:13, 16 201:*1* **bigger** 105:1 230:21 biggest 108:9 187:21 bike 115:1 **biker** 115:1 bikes 200:22 BILL 4:9 9:1 111:5, 9 118:9, 12 233:22 268:8 billion 30:18, 19 55:10 62:4 70:5 75:5 82:18 84:18 85:15 123:7 147:10 204:19 218:16 219:3 224:17 billions 256:6 **bio-based** 250:19 biodiesel 280:10, 21 biodiversity 236:21 **biofuels** 250:11 251:16 280:10, 20 281:*1* biological 41:8 bipartisan 175:20 **BIPOC** 96:2 165:18 216:3 Birgfeld 15:3 birgfeld.erin@epa.g **ov** 15:3

birth 275:14
birthplace 166:4
hit 25·1 74·6
133:2 201:14 270:1 280:5 282:8
270:1 280:5 282:8
283:1
bite 140:21
BJORK 2:15
33:19, 22 34:2
black 109:12
141:20 143:2 <i>1</i>
150:18 154:10
163:3 213:4
253:16 256:22
259:10
blends 131:1, 4 132:3 250:11 251:15
132: <i>3</i> 250: <i>11</i>
251: <i>15</i>
bless 80:14
blessed 53:19
blew 208:15
Block 2:6 3:1,5
4:1, 8 5:1, 9 6:1, 7
7:1 16:12 68:17
76:15 136:14
164:17 181:19
184:14 187:10
184: <i>14</i> 187: <i>10</i> 232: <i>14</i> , <i>15</i> 235: <i>19</i>
248: <i>14</i>
blocks 212:20
blue 92:2 280:16
BlueGreen 3:14
87:7, 8 88:21
Board 27:8
209:18 224:2
bodies 85:21
body 215: <i>16</i> bold 35: <i>3</i> 46: <i>18</i>
48:7 118:20 121:7
154:2 166: <i>10</i> , <i>12</i> 190:7 195:6 254:8
190:7 195:6 254:8
261:22
bolder 31:12
boldest 33:15
46:19 167:5
261:20
boldly 44:22
260:15
bolster 9:18
bolt 81:5
bond 118:22
bond 118:22 books 51:7 boost 50: <i>14</i>
hoost 50:14
borders 202:9
born 44:21 96:16
98: <i>15</i>
bothered 192:4
bottom 94:3 107:7
bought 85:22
222:12, 14

bow 93:6
bowl 79:15
boy 193:6
BRADLEE 4:9
118:9, <i>12</i> , <i>17</i>
brains 256:15 brakes 24:22
47: <i>17</i>
braking 24:22
271: <i>3</i> BRANDT 6: <i>8</i> , <i>9</i> ,
10 187:13, 16
196:1, 2, 6, 9 201:8,
11
brave 191: <i>13</i>
bravery 236:22
break 14:21, 22 25:5 86:7 132:18, 21 133:2, 5 246:16,
21 133:2, 5 246:16.
17 247:1 272:16
273:8
breaks 258:21
breath 33:4, 6, 17
195:2, <i>5</i> 240: <i>16</i> breathable 33: <i>12</i>
breathe 28:5 32:4
34: <i>16</i> 100: <i>14</i>
112: <i>19</i> 113: <i>19</i> 115: <i>4</i> 156: <i>4</i>
115:4 156:4
194:20, 22 196:18 197:10 198:1, 5, 21
253:10, 21 267:19
274:11
breathed 114:20
breathes 32:6
breathing 112:5 113:11 171:17
113:77 171:77 198:9 199:12
213:10, 16 262:10
267:10 274:10
286:20
breaths 32:5, 6 BRIAN 5:22 182:9
Bridge 6:11 192:3
209:18 211:12
bridging 209:20
brief 246:11
277:21 287:18
290:21
briefing 174:7 briefly 258:13
brighter 198:20
bring 86: <i>16</i> 89:9 105:8 137:2 <i>1</i> 138: <i>11</i> 214:6 219: <i>11</i> 239:22
105:8 137:21
138:11 214:6
219: <i>11</i> 239: <i>22</i> bringing 180: <i>1</i>
brings 33:5
British 201:15
202:5

broad 126:5
127: <i>1</i> 148:8
broadband 19:8
broaden 131:21 broader 12:4
broader 12:4
27:17 126:13
27: <i>17</i> 126: <i>13</i> 253:22 284: <i>15</i> broken 49: <i>14</i>
105:7 255:22
bronchitis 100:13
brought 11:18
81:2 <i>1</i> 138: <i>1</i>
228:20
brown 154:11
Buchsbaum 9:3
buck 239:5
bucketfuls 51:10
build 80:9 85:17 87:11 88:11 98:17 148:19 149:3 168:16 192:3
8/:11 88:11 98:1/
148:19 149:3
217:22
builders 56:6
building 89:5, 11
90:9 149:2 233:18
260:16 278:6
buildings 97:1
144:20
builds 213:4
built 25:17 bulk 156:8
bulk 156:8
burden 20: <i>15</i> 32: <i>19</i> 39:22
109: <i>15</i> 239: <i>6</i>
burdens 57:13
Bureau 115:16
bureaucratic
103: <i>16</i>
burn 40:6 77:17
79:21 282:2
burning 34:20
92:6 104:8 202:10 229:1
bus 99:2 114:16,
20 274:16
buses 30:17 83:9
99:2 113:21
185:10 259:12
271:2, 9
Business 2:7
16: <i>17</i> 38:2 <i>1</i> 147: <i>4</i>
180:2 <i>1</i> 228: <i>1</i>
278:21
businesses 60:3
114:13 147:8
181: <i>12</i> busy 32: <i>11</i> , <i>14</i>
200:20 210:11
button 60:20 94:2
102:22 104:12

178:*17* 179:*1* 186:9 225:22 241:21 **buyers** 142:7 **buying** 185:14 **buy-right** 143:*16* bypassing 29:6 < C > calibration 178:1 California 49:6 117:11, 15 146:18 153:12 197:18 198:13 224:1 250:8, 15 251:6, 10 267:5 269:5 California's 198:9 **call** 15:20 16:1 37:13, 16 58:19, 22 66:10 76:10, 13 102:13 128:18, 21 132:10 135:21 136:2 164:13, 16 182:7 183:19, 22 184:4 196:15 205:20 206:1 220:17 232:8, 11 248:4, 7 262:14 269:20 272:12 273:1 285:1 287:20 289:3 **called** 15:14, 18 22:8 26:19 30:6 37:7, 11 45:6 58:8, 12, 15, 17 75:21 76:3, 6, 8 102:2, 6, 9 103:13 123:13 128:7, 11, 14, 16 129:5 132:12 135:10, 14, 17, 19 164:2, 6, 9, 11 173:1 183:13, 17 184:9, 11 205:9, 13, *16* 216:*17* 227:*4* 231:19 232:1, 4 244:2, 14 247:16, 19, 22 248:2 253:10 257:11 262:22 266:15 282:6 287:11 **calling** 41:4 83:10 92:14 110:14, 17 179:20 236:8 calls 245:17 camera 15:15 37:8 58:9 60:19 75:22 77:11 102:3 128:8 135:11 164:*3* 183:*4*, *15*

buy 35:21 43:15

205:10 231:20 238:1 247:17 camp 237:11 Campaign 3:21 98:11 105:8 Canada 43:11 201:15 Canadian 43:10 cancer 18:12 162:3, 6 163:6 245:*3* canoeing 28:17 **canopy** 144:20 **cap** 49:5, 21 104:7 126:11 157:20 capability 86:3 capacity 211:22 214:3 268:18 270:20 capita 144:22 capitalist 240:7 capture 62:8 89:17 157:7 capturing 89:20 car 20:11, 12, 18, 20 21:5 23:10, 19 24:8, 16 25:5 26:1, 7 27:19 28:6 29:11 32:3, 9 35:22 36:9 40:6 42:14 43:15 59:16 74:5 82:12 94:14 96:4 98:13, 17 100:9 112:13 113:16 114:1 115:8 116:14 121:3 137:6, 21 138:14 142:5, 6, 8, 11 143:15 144:7 145:*16* 146:*1* 151:21 152:16 154:2, 6 162:22 163:7 166:11, 15 167:6, 8 169:7 185:*11* 190:9, *13* 194:14 196:15, 19 197:11 200:20 206:15 207:7, 12, 16, 19, 21 208:19, 22 209:5 211:11 212:14, 16 214:5 217:6 221:14 241:11 244:18 245:14 246:3 254:3 255:12 257:15 261:8 280:9, 21 283:13 286:5, 13, 15 **CARA** 2:19 44:8, 12

183:3 233:2

carbon 31:8 36:2 41: <i>18</i> 60:2 62: <i>13</i>
41:18 60:2 62:13 63:20 64:10 69:9,
63:20 64:10 69:9, 15, 18 71:14 78:12
86: <i>11</i> 95: <i>19</i> 143: <i>18</i> 144:22
145:16 144:22 145:1 151:17
153:4 160:4
162: <i>12</i> 171: <i>7</i> , <i>18</i> 175: <i>4</i> 181: <i>4</i> 186: <i>1</i> ,
22 188:2 229:1, 17
236.13 242.7
236: <i>13</i> 242: <i>7</i> 244:20 246: <i>1</i>
250:4, 14 255:14
281:11 282:3, 14,
<i>15</i> 285: <i>11</i>
carbon-free 206:18
carbon-neutral
144:2 <i>1</i>
car-centric 114:5
Care 44:13
118:22 120:4 161: <i>14</i> 202:8
161: <i>14</i> 202:8
229:8 253: <i>13</i>
267:4, 6, 22 268:14,
<i>16</i> 274: <i>4</i>
careers 138:9
carefully 10:9
117:20 240:19
cares 241:8 286:17
Carolina 143:5
167:20 208:7, 9, 17
212:8
carry 20:20
228:13 234:13
Cars 11:2 17:1
20:5, 9 21:1, 3, 11
23:1 27:18 28:3, 8
29:8, 22 30:4, 13,
17 31:13 36:5
43:12 45:10 59:18
62:5 63:14, 16
83:6, 10, 13 86:1
91:1 94:19 97:16
98:17 99:3 100:3
104:15, 17 107:16
108:5 110:70
108:3 110:16 112:9 113:21 114:8, 9 116:18, 21
114:8, 9 116:18, 21 119:12 120:2, 14
119:12 120:2, 14 121:2 137:9, 12
140:7, 14 149:21
140:7, 14 149:21 153:5 154:3
155:5 154:5 156:12 159:13
162: <i>14</i> 166: <i>5</i>
170: <i>14</i> 175: <i>3</i>
170.14 173.3 176:6 185:7 186:0
176:6 185:7 186:9
188:3, / 190:3 193:18 194:17
188:3, 7 190:3 193:18 194:17 195:15 197:13
188:3, 7 190:5 193:18 194:17 195:15 197:13 198:9, 16 200:10.
198:5, 7 190:5 193:18 194:17 195:15 197:13 198:9, 16 200:10,

22 201:3, 4 204:7, 21 207:3, 6, 14 208:17 215:21 218:9 219:2 221:22 222:10, 15 224:7 225:8 230:3 234:6 236:14 238:19, 20 239:3 242:8, 21 245:5 253:20 254:1, 9 257:13 259:12 271:2, 5, 8 284:15 286:14 case 47:15 73:9 171:13 180:8 190:3 212:4 287:2 cases 18:4 40:7 281:4 casino 113:19 catalyst 178:1 catastrophes 48:6 93:8 catastrophic 34:18 235:4 262:12 catch 105:18 category 258:13 CATHERINE 2:14 Catholic 196:12 199:18 cause 18:3 150:13 244:7 253:2 275:13 caused 21:16 49:4 69:16 99:4 170:22 186:12 211:4 240:7 245:2 causes 36:19 150:14 174:20 198:9 215:22 228:22 267:13 causing 21:14 46:1 98:19 171:8 229:3 259:7 cell 55:17 123:6, 11, 14 127:10 cells 120:12 Celsius 225:14 255:16 Center 2:4 4:11 8:19 90:9 122:10 213:20 261:4 262:6 278:4 283:11 centers 114:15 Central 227:15 centuries 282:16 century 67:5 166:12 203:7 20:18 (20:18 120:19 120:18 (20:18 120:19 120:18 (20:18 120:19 120:18 (20:18 120:19 (20:18 120:19 (20:18 120:19 (20:18 120:19 (20:18 120:19 (20:18 120:19 (20:18 120:19 (20:18 120:19 (20:18 (20:18 120:19 (20:18 (20	
21 207:3, 6, 14 208:17 215:21 218:9 219:2 221:22 222:10, 15 224:7 225:8 230:3 234:6 236:14 238:19, 20 239:3 242:8, 21 245:5 253:20 254:1, 9 257:13 259:12 271:2, 5, 8 284:15 286:14 case 47:15 73:9 171:13 180:8 190:3 212:4 287:2 cases 18:4 40:7 281:4 casino 113:19 catalyst 178:1 catastrophes 48:6 93:8 catastrophic 34:18 235:4 262:12 catch 105:18 category 258:13 CATHERINE 2:14 Catholic 196:12 199:18 cause 18:3 150:13 244:7 253:2 275:13 caused 21:16 49:4 69:16 99:4 170:22 186:12 211:4 240:7 245:2 causes 36:19 150:14 174:20 198:9 215:22 228:22 267:13 causing 21:14 46:1 98:19 171:8 229:3 259:7 cell 55:17 123:6, 11, 14 127:10 cells 120:12 Celsius 225:14 255:16 Center 2:4 4:11 8:19 90:9 122:10 213:20 261:4 262:6 278:4 283:11 central 227:15 centuries 282:16 century 67:5 166:12 203:7 210:18	22 201:3.4 204:7.
218:9 219:2 221:22 222:10, 15 224:7 225:8 230:3 234:6 236:14 238:19, 20 239:3 242:8, 21 245:5 253:20 254:1, 9 257:13 259:12 271:2, 5, 8 284:15 286:14 case 47:15 73:9 171:13 180:8 190:3 212:4 287:2 cases 18:4 40:7 281:4 casino 113:19 catalyst 178:1 catastrophes 48:6 93:8 catastrophic 34:18 235:4 262:12 catch 105:18 category 258:13 CATHERINE 2:14 Catholic 196:12 199:18 cause 18:3 150:13 244:7 253:2 275:13 caused 21:16 49:4 69:16 99:4 170:22 186:12 211:4 240:7 245:2 causes 36:19 150:14 174:20 198:9 215:22 228:22 267:13 causing 21:14 46:1 98:19 171:8 229:3 259:7 cell 55:17 123:6, 11, 14 127:10 cells 120:12 Celsius 225:14 255:16 Center 2:4 4:11 8:19 90:9 122:10 213:20 261:4 262:6 278:4 283:11 centers 114:15 Century 67:5 166:12 203:7 210:18	21 207:3, 6, 14
221:22 222:10, 15 224:7 225:8 230:3 234:6 236:14 238:19, 20 239:3 242:8, 21 245:5 253:20 254:1, 9 257:13 259:12 271:2, 5, 8 284:15 286:14 case 47:15 73:9 171:13 180:8 190:3 212:4 287:2 cases 18:4 40:7 281:4 casino 113:19 catalyst 178:1 catastrophic 34:18 235:4 262:12 catch 105:18 category 258:13 CATHERINE 2:14 Catholic 196:12 199:18 cause 18:3 150:13 244:7 253:2 275:13 caused 21:16 49:4 69:16 99:4 170:22 186:12 211:4 240:7 245:2 causes 36:19 150:14 174:20 198:9 215:22 228:22 267:13 causing 21:14 46:1 98:19 171:8 229:3 259:7 cell 55:17 123:6, 11, 14 127:10 cells 120:12 Celsius 225:14 255:16 Center 2:4 4:11 8:19 90:9 122:10 213:20 261:4 262:6 278:4 283:11 centers 114:15 Central 227:15 centuries 282:16 century 67:5 166:12 203:7 210:18	
238:19, 20 239:3 242:8, 21 245:5 253:20 254:1, 9 257:13 259:12 271:2, 5, 8 284:15 286:14 case 47:15 73:9 171:13 180:8 190:3 212:4 287:2 cases 18:4 40:7 281:4 casino 113:19 catalyst 178:1 catastrophes 48:6 93:8 catastrophic 34:18 235:4 262:12 catch 105:18 category 258:13 CATHERINE 2:14 Catholic 196:12 199:18 cause 18:3 150:13 244:7 253:2 275:13 caused 21:16 49:4 69:16 99:4 170:22 186:12 211:4 240:7 245:2 causes 36:19 150:14 174:20 198:9 215:22 228:22 267:13 causing 21:14 46:1 98:19 171:8 229:3 259:7 cell 55:17 123:6, 11, 14 127:10 cels 120:12 Celsius 225:14 255:16 Center 2:4 4:11 8:19 90:9 122:10 213:20 261:4 263:11 centers 114:15 Century 67:5 166:12 203:7 210:18	218:9 219:2 221:22 222:10 15
238:19, 20 239:3 242:8, 21 245:5 253:20 254:1, 9 257:13 259:12 271:2, 5, 8 284:15 286:14 case 47:15 73:9 171:13 180:8 190:3 212:4 287:2 cases 18:4 40:7 281:4 casino 113:19 catalyst 178:1 catastrophes 48:6 93:8 catastrophic 34:18 235:4 262:12 catch 105:18 category 258:13 CATHERINE 2:14 Catholic 196:12 199:18 cause 18:3 150:13 244:7 253:2 275:13 caused 21:16 49:4 69:16 99:4 170:22 186:12 211:4 240:7 245:2 causes 36:19 150:14 174:20 198:9 215:22 228:22 267:13 causing 21:14 46:1 98:19 171:8 229:3 259:7 cell 55:17 123:6, 11, 14 127:10 cels 120:12 Celsius 225:14 255:16 Center 2:4 4:11 8:19 90:9 122:10 213:20 261:4 263:11 centers 114:15 Century 67:5 166:12 203:7 210:18	224:7 225:8 230:3
253:20 254:1, 9 257:13 259:12 271:2, 5, 8 284:15 286:14 case 47:15 73:9 171:13 180:8 190:3 212:4 287:2 cases 18:4 40:7 281:4 casino 113:19 catalyst 178:1 catastrophes 48:6 93:8 catastrophic 34:18 235:4 262:12 catch 105:18 category 258:13 CATHERINE 2:14 Catholic 196:12 199:18 cause 18:3 150:13 244:7 253:2 275:13 caused 21:16 49:4 69:16 99:4 170:22 186:12 211:4 240:7 245:2 causes 36:19 150:14 174:20 198:9 215:22 228:22 267:13 causing 21:14 46:1 98:19 171:8 229:3 259:7 cell 55:17 123:6, 11, 14 127:10 cells 120:12 Celsius 225:14 255:16 Center 2:4 4:11 8:19 90:9 122:10 213:20 261:4 262:6 278:4 283:11 centers 114:15 Central 227:15 centuries 282:16 century 67:5 166:12 203:7 210:18	234:6 236:14
253:20 254:1, 9 257:13 259:12 271:2, 5, 8 284:15 286:14 case 47:15 73:9 171:13 180:8 190:3 212:4 287:2 cases 18:4 40:7 281:4 casino 113:19 catalyst 178:1 catastrophes 48:6 93:8 catastrophic 34:18 235:4 262:12 catch 105:18 category 258:13 CATHERINE 2:14 Catholic 196:12 199:18 cause 18:3 150:13 244:7 253:2 275:13 caused 21:16 49:4 69:16 99:4 170:22 186:12 211:4 240:7 245:2 causes 36:19 150:14 174:20 198:9 215:22 228:22 267:13 causing 21:14 46:1 98:19 171:8 229:3 259:7 cell 55:17 123:6, 11, 14 127:10 cells 120:12 Celsius 225:14 255:16 Center 2:4 4:11 8:19 90:9 122:10 213:20 261:4 262:6 278:4 283:11 centers 114:15 Central 227:15 centuries 282:16 century 67:5 166:12 203:7 210:18	238:19, 20 239:3
257:13 259:12 271:2, 5, 8 284:15 286:14 case 47:15 73:9 171:13 180:8 190:3 212:4 287:2 cases 18:4 40:7 281:4 casino 113:19 catalyst 178:1 catastrophes 48:6 93:8 catastrophic 34:18 235:4 262:12 catch 105:18 category 258:13 CATHERINE 2:14 Catholic 196:12 199:18 cause 18:3 150:13 244:7 253:2 275:13 caused 21:16 49:4 69:16 99:4 170:22 186:12 211:4 240:7 245:2 causes 36:19 150:14 174:20 198:9 215:22 228:22 267:13 causing 21:14 46:1 98:19 171:8 229:3 259:7 cell 55:17 123:6, 11, 14 127:10 cells 120:12 Celsius 225:14 255:16 Center 2:4 4:11 8:19 90:9 122:10 213:20 261:4 262:6 278:4 283:11 centers 114:15 Century 67:5 166:12 203:7 210:18	253:20 254:1.9
286:14 case 47:15 73:9 171:13 180:8 190:3 212:4 287:2 cases 18:4 40:7 281:4 casino 113:19 catalyst 178:1 catastrophes 48:6 93:8 catastrophic 34:18 235:4 262:12 catch 105:18 category 258:13 CATHERINE 2:14 Catholic 196:12 199:18 cause 18:3 150:13 244:7 253:2 275:13 caused 21:16 49:4 69:16 99:4 170:22 186:12 211:4 240:7 245:2 causes 36:19 150:14 174:20 198:9 215:22 228:22 267:13 causing 21:14 46:1 98:19 171:8 229:3 259:7 cell 55:17 123:6, 11, 14 127:10 cells 120:12 Celsius 225:14 255:16 Center 2:4 4:11 8:19 90:9 122:10 213:20 261:4 262:6 278:4 283:11 centers 114:15 Century 67:5 166:12 203:7 210:18	257:13 259:12
case 47:15 73:9 171:13 180:8 190:3 212:4 287:2 cases 18:4 40:7 281:4 casino 113:19 catalyst 178:1 catastrophes 48:6 93:8 catastrophic 34:18 235:4 262:12 catch 105:18 category 258:13 CATHERINE 2:14 Catholic 196:12 199:18 cause 18:3 150:13 244:7 253:2 275:13 caused 21:16 49:4 69:16 99:4 170:22 186:12 211:4 240:7 245:2 causes 36:19 150:14 174:20 198:9 215:22 228:22 267:13 causing 21:14 46:1 98:19 171:8 229:3 259:7 cell 55:17 123:6, 11, 14 127:10 cells 120:12 Celsius 225:14 255:16 Center 2:4 4:11 8:19 90:9 122:10 213:20 261:4 262:6 278:4 283:11 centers 114:15 Century 67:5 166:12 203:7 210:18	
190:3 212:4 287:2 cases 18:4 40:7 281:4 casino 113:19 catalyst 178:1 catastrophes 48:6 93:8 catastrophic 34:18 235:4 262:12 catch 105:18 category 258:13 CATHERINE 2:14 Catholic 196:12 199:18 cause 18:3 150:13 244:7 253:2 275:13 caused 21:16 49:4 69:16 99:4 170:22 186:12 211:4 240:7 245:2 causes 36:19 150:14 174:20 198:9 215:22 228:22 267:13 causing 21:14 46:1 98:19 171:8 229:3 259:7 cell 55:17 123:6, 11, 14 127:10 cells 120:12 Celsius 225:14 255:16 Center 2:4 4:11 8:19 90:9 122:10 213:20 261:4 262:6 278:4 283:11 centers 114:15 Century 67:5 166:12 203:7 210:18	
cases 18:4 40:7 281:4 casino 113:19 catalyst 178:1 catastrophes 48:6 93:8 catastrophic 34:18 235:4 262:12 catch 105:18 category 258:13 CATHERINE 2:14 Catholic 196:12 199:18 cause 18:3 150:13 244:7 253:2 275:13 caused 21:16 49:4 69:16 99:4 170:22 186:12 211:4 240:7 245:2 causes 36:19 150:14 174:20 198:9 215:22 228:22 267:13 causing 21:14 46:1 98:19 171:8 229:3 259:7 cell 55:17 123:6, 11, 14 127:10 cells 120:12 Celsius 225:14 255:16 Center 2:4 4:11 8:19 90:9 122:10 213:20 261:4 262:6 278:4 283:11 centers 114:15 Century 67:5 166:12 203:7 210:18	171: <i>13</i> 180:8
281:4 casino 113:19 catalyst 178:1 catastrophes 48:6 93:8 catastrophic 34:18 235:4 262:12 catch 105:18 category 258:13 CATHERINE 2:14 Catholic 196:12 199:18 cause 18:3 150:13 244:7 253:2 275:13 caused 21:16 49:4 69:16 99:4 170:22 186:12 211:4 240:7 245:2 causes 36:19 150:14 174:20 198:9 215:22 228:22 267:13 causing 21:14 46:1 98:19 171:8 229:3 259:7 cell 55:17 123:6, 11, 14 127:10 cells 120:12 Celsius 225:14 255:16 Center 2:4 4:11 8:19 90:9 122:10 213:20 261:4 262:6 278:4 283:11 centers 114:15 Century 67:5 166:12 203:7 210:18	
casino 113:19 catalyst 178:1 catastrophes 48:6 93:8 catastrophic 34:18 235:4 262:12 catch 105:18 category 258:13 CATHERINE 2:14 Catholic 196:12 199:18 cause 18:3 150:13 244:7 253:2 275:13 caused 21:16 49:4 69:16 99:4 170:22 186:12 211:4 240:7 245:2 causes 36:19 150:14 174:20 198:9 215:22 228:22 267:13 causing 21:14 46:1 98:19 171:8 229:3 259:7 cell 55:17 123:6, 11, 14 127:10 cells 120:12 Celsius 225:14 255:16 Center 2:4 4:11 8:19 90:9 122:10 213:20 261:4 262:6 278:4 283:11 centers 114:15 Century 67:5 166:12 203:7 210:18	
catastrophes 48:6 93:8 catastrophic 34:18 235:4 262:12 catch 105:18 category 258:13 CATHERINE 2:14 Catholic 196:12 199:18 cause 18:3 150:13 244:7 253:2 275:13 caused 21:16 49:4 69:16 99:4 170:22 186:12 211:4 240:7 245:2 causes 36:19 150:14 174:20 198:9 215:22 228:22 267:13 causing 21:14 46:1 98:19 171:8 229:3 259:7 cell 55:17 123:6, 11, 14 127:10 cells 120:12 Celsius 225:14 255:16 Center 2:4 4:11 8:19 90:9 122:10 213:20 261:4 262:6 278:4 283:11 centers 114:15 Central 227:15 centuries 282:16 century 67:5 166:12 203:7 210:18	casino 113:19
93:8 catastrophic 34:18 235:4 262:12 catch 105:18 category 258:13 CATHERINE 2:14 Catholic 196:12 199:18 cause 18:3 150:13 244:7 253:2 275:13 caused 21:16 49:4 69:16 99:4 170:22 186:12 211:4 240:7 245:2 causes 36:19 150:14 174:20 198:9 215:22 228:22 267:13 causing 21:14 46:1 98:19 171:8 229:3 259:7 cell 55:17 123:6, 11, 14 127:10 cells 120:12 Celsius 225:14 255:16 Center 2:4 4:11 8:19 90:9 122:10 213:20 261:4 262:6 278:4 283:11 centers 114:15 Century 67:5 166:12 203:7 210:18	
235:4 262:12 catch 105:18 category 258:13 CATHERINE 2:14 Catholic 196:12 199:18 cause 18:3 150:13 244:7 253:2 275:13 caused 21:16 49:4 69:16 99:4 170:22 186:12 211:4 240:7 245:2 causes 36:19 150:14 174:20 198:9 215:22 228:22 267:13 causing 21:14 46:1 98:19 171:8 229:3 259:7 cell 55:17 123:6, 11, 14 127:10 cells 120:12 Celsius 225:14 255:16 Center 2:4 4:11 8:19 90:9 122:10 213:20 261:4 262:6 278:4 283:11 centers 114:15 Century 67:5 166:12 203:7 210:18	
catch 105:18 category 258:13 CATHERINE 2:14 Catholic 196:12 199:18 cause 18:3 150:13 244:7 253:2 275:13 caused 21:16 49:4 69:16 99:4 170:22 186:12 211:4 240:7 245:2 causes 36:19 150:14 174:20 198:9 215:22 228:22 267:13 causing 21:14 46:1 98:19 171:8 229:3 259:7 cell 55:17 123:6, 11, 14 127:10 cells 120:12 Celsius 225:14 255:16 Center 2:4 4:11 8:19 90:9 122:10 213:20 261:4 262:6 278:4 283:11 centers 114:15 Century 67:5 166:12 203:7 210:18	
category 258:13 CATHERINE 2:14 Catholic 196:12 199:18 cause 18:3 150:13 244:7 253:2 275:13 caused 21:16 49:4 69:16 99:4 170:22 186:12 211:4 240:7 245:2 causes 36:19 150:14 174:20 198:9 215:22 228:22 267:13 causing 21:14 46:1 98:19 171:8 229:3 259:7 cell 55:17 123:6, 11, 14 127:10 cells 120:12 Celsius 225:14 255:16 Center 2:4 4:11 8:19 90:9 122:10 213:20 261:4 262:6 278:4 283:11 centers 114:15 Century 67:5 166:12 203:7 210:18	
CATHERINE 2:14 Catholic 196:12 199:18 cause 18:3 150:13 244:7 253:2 275:13 caused 21:16 49:4 69:16 99:4 170:22 186:12 211:4 240:7 245:2 causes 36:19 150:14 174:20 198:9 215:22 228:22 267:13 causing 21:14 46:1 98:19 171:8 229:3 259:7 cell 55:17 123:6, 11, 14 127:10 cells 120:12 Celsius 225:14 255:16 Center 2:4 4:11 8:19 90:9 122:10 213:20 261:4 262:6 278:4 283:11 centers 114:15 Century 67:5 166:12 203:7 210:18	
199:18 cause 18:3 150:13 244:7 253:2 275:13 caused 21:16 49:4 69:16 99:4 170:22 186:12 211:4 240:7 245:2 causes 36:19 150:14 174:20 198:9 215:22 228:22 267:13 causing 21:14 46:1 98:19 171:8 229:3 259:7 cell 55:17 123:6, 11, 14 127:10 cells 120:12 Celsius 225:14 255:16 Center 2:4 4:11 8:19 90:9 122:10 213:20 261:4 262:6 278:4 283:11 centers 114:15 Central 227:15 centuries 282:16 century 67:5 166:12 203:7 210:18	CATHERINE 2:14
cause 18:3 150:13 244:7 253:2 275:13 caused 21:16 49:4 69:16 99:4 170:22 186:12 211:4 240:7 245:2 causes 36:19 150:14 174:20 198:9 215:22 228:22 267:13 causing 21:14 46:1 98:19 171:8 229:3 259:7 cell 55:17 123:6, 11, 14 127:10 cells 120:12 Celsius 225:14 255:16 Center 2:4 4:11 8:19 90:9 122:10 213:20 261:4 262:6 278:4 283:11 centers 114:15 Century 67:5 166:12 203:7 210:18	Catholic 196:12
244:7 253:2 275:13 caused 21:16 49:4 69:16 99:4 170:22 186:12 211:4 240:7 245:2 causes 36:19 150:14 174:20 198:9 215:22 228:22 267:13 causing 21:14 46:1 98:19 171:8 229:3 259:7 cell 55:17 123:6, 11, 14 127:10 cells 120:12 Celsius 225:14 255:16 Center 2:4 4:11 8:19 90:9 122:10 213:20 261:4 262:6 278:4 283:11 centers 114:15 Century 67:5 166:12 203:7 210:18	
69:16 99:4 170:22 186:12 211:4 240:7 245:2 causes 36:19 150:14 174:20 198:9 215:22 228:22 267:13 causing 21:14 46:1 98:19 171:8 229:3 259:7 cell 55:17 123:6, 11, 14 127:10 cells 120:12 Celsius 225:14 255:16 Center 2:4 4:11 8:19 90:9 122:10 213:20 261:4 262:6 278:4 283:11 centers 114:15 Century 67:5 166:12 203:7 210:18	244:7 253:2
69:16 99:4 170:22 186:12 211:4 240:7 245:2 causes 36:19 150:14 174:20 198:9 215:22 228:22 267:13 causing 21:14 46:1 98:19 171:8 229:3 259:7 cell 55:17 123:6, 11, 14 127:10 cells 120:12 Celsius 225:14 255:16 Center 2:4 4:11 8:19 90:9 122:10 213:20 261:4 262:6 278:4 283:11 centers 114:15 Century 67:5 166:12 203:7 210:18	275:13
240:7 245:2 causes 36:19 150:14 174:20 198:9 215:22 228:22 267:13 causing 21:14 46:1 98:19 171:8 229:3 259:7 cell 55:17 123:6, 11, 14 127:10 cells 120:12 Celsius 225:14 255:16 Center 2:4 4:11 8:19 90:9 122:10 213:20 261:4 262:6 278:4 283:11 centers 114:15 Central 227:15 centuries 282:16 century 67:5 166:12 203:7 210:18	69:16 99:4 170:22
causes 36:19 150:14 174:20 198:9 215:22 228:22 267:13 causing 21:14 46:1 98:19 171:8 229:3 259:7 cell 55:17 123:6, 11, 14 127:10 cells 120:12 Celsius 225:14 255:16 Center 2:4 4:11 8:19 90:9 122:10 213:20 261:4 262:6 278:4 283:11 centers 114:15 Central 227:15 centuries 282:16 century 67:5 166:12 203:7 210:18	186: <i>12</i> 211: <i>4</i>
150:14 174:20 198:9 215:22 228:22 267:13 causing 21:14 46:1 98:19 171:8 229:3 259:7 cell 55:17 123:6, 11, 14 127:10 cells 120:12 Celsius 225:14 255:16 Center 2:4 4:11 8:19 90:9 122:10 213:20 261:4 262:6 278:4 283:11 centers 114:15 Central 227:15 centuries 282:16 century 67:5 166:12 203:7 210:18	240:7 245:2
198:9 215:22 228:22 267:13 causing 21:14 46:1 98:19 171:8 229:3 259:7 cell 55:17 123:6, 11, 14 127:10 cells 120:12 Celsius 225:14 255:16 Center 2:4 4:11 8:19 90:9 122:10 213:20 261:4 262:6 278:4 283:11 centers 114:15 Central 227:15 centuries 282:16 century 67:5 166:12 203:7 210:18	150:14 174:20
causing 21:14 46:1 98:19 171:8 229:3 259:7 cell 55:17 123:6, 11, 14 127:10 cells 120:12 Celsius 225:14 255:16 Center 2:4 4:11 8:19 90:9 122:10 213:20 261:4 262:6 278:4 283:11 centers 114:15 Central 227:15 centuries 282:16 century 67:5 166:12 203:7 210:18	198:9 215:22
46:1 98:19 171:8 229:3 259:7 cell 55:17 123:6, 11, 14 127:10 cells 120:12 Celsius 225:14 255:16 Center 2:4 4:11 8:19 90:9 122:10 213:20 261:4 262:6 278:4 283:11 centers 114:15 Central 227:15 centuries 282:16 century 67:5 166:12 203:7 210:18	
229:3 259:7 cell 55:17 123:6, 11, 14 127:10 cells 120:12 Celsius 225:14 255:16 Center 2:4 4:11 8:19 90:9 122:10 213:20 261:4 262:6 278:4 283:11 centers 114:15 Central 227:15 centuries 282:16 century 67:5 166:12 203:7 210:18	46:1 98:19 171:8
cells 120:12 Celsius 225:14 255:16 Center 2:4 4:11 8:19 90:9 122:10 213:20 261:4 262:6 278:4 283:11 centers 114:15 Central 227:15 centuries 282:16 century 67:5 166:12 203:7 210:18	229:3 259:7
cells 120:12 Celsius 225:14 255:16 Center 2:4 4:11 8:19 90:9 122:10 213:20 261:4 262:6 278:4 283:11 centers 114:15 Central 227:15 centuries 282:16 century 67:5 166:12 203:7 210:18	cell 55:17 123:6,
Celsius 225:14 255:16 Center 2:4 4:11 8:19 90:9 122:10 213:20 261:4 262:6 278:4 283:11 centers 114:15 Central 227:15 centuries 282:16 century 67:5 166:12 203:7 210:18	11, 14 127:10 cells 120:12
Center 2:4 4:11 8:19 90:9 122:10 213:20 261:4 262:6 278:4 283:11 centers 114:15 Central 227:15 centuries 282:16 century 67:5 166:12 203:7 210:18	Celsius 225:14
8:19 90:9 122:10 213:20 261:4 262:6 278:4 283:11 centers 114:15 Central 227:15 centuries 282:16 century 67:5 166:12 203:7 210:18	
213:20 261:4 262:6 278:4 283:11 centers 114:15 Central 227:15 centuries 282:16 century 67:5 166:12 203:7 210:18	
283:11 centers 114:15 Central 227:15 centuries 282:16 century 67:5 166:12 203:7 210:18	213:20 261:4
centers 114:15 Central 227:15 centuries 282:16 century 67:5 166:12 203:7 210:18	
Central 227:15 centuries 282:16 century 67:5 166:12 203:7 210:18	
centuries 282:16 century 67:5 166:12 203:7 210:18	Central 227:15
210:18	centuries 282:16
210:18	century 67:5
	210:18

203:7
CEO 270:8
certain 258:8
certainly 40:11
109:7 241:20
certainty 89:2
126:2
chain 95:4
chains 89:11
Chair 27:8, 9
143:4
chairs 16:20
challenge 11:9
46:17 47:5 55:7
66:16 89:5 258:6
challenges 87:10.
challenges 87: <i>10</i> , <i>15</i> 109: <i>3</i> 228: <i>6</i>
challenging 56:2
65:17 122:16
123:21
champion 46:21
284:5
championed 260:22
chance 14:15 47:2
83:14 226:19
229:20 289:7
change 9:18 21:20
change 9:18 21:20 28:5 31:5, 9 33:2
34:8, 19 35:1, 5, 8,
34:8, 19 35:1, 5, 8, 16, 19, 20 36:4, 18, 19 41:15 42:5
19 41:15 42:5
48:2 <i>1</i> 51:20 53: <i>1</i> ,
22 55:2 66:7
87:14 92:8 99:9
100:2 104:2
111: <i>17</i> 112:8
116:22 118:20
120:6, <i>21</i> 141: <i>18</i> ,
22 145:20 146:13
148: <i>10</i> 149: <i>18</i> 151: <i>11</i> , <i>19</i> 153: <i>7</i> ,
151:11, 19 153:7,
<i>22</i> 154:7 159:2 <i>1</i>
166:20 167: <i>1</i>
176:2 <i>1</i> 180: <i>17</i>
188: <i>5</i> , <i>10</i> , <i>17</i> 190: <i>5</i>
194: <i>10</i> 195: <i>7</i>
199: <i>1</i> , <i>4</i> , <i>6</i> , <i>11</i>
200:12, 13, 16
201:2 206:2 <i>1</i>
207:3, 22 209:3
215:22 216:8
219:11 224:22
225:12, 21 228:5
215:22 216:8 219:11 224:22 225:12, 21 228:5 229:1, 14, 19 231:8
237:5 242: <i>13</i>
244:9, 10, 22
245:12, 15 246:2
252:21 253:22
255:19 257:4
258:7 259:21
261:15, 19 262:12,

14 267:12 276:16 280:6 283:16 284:4 changed 45:6 63:22 82:21 188:*14* 280:*14* **changes** 23:19, 20 47:14 50:20 67:21 243:18 274:10 channel 185:6 **Chapel** 208:8 CHAPMAN 5:4 Chapter 3:17 5:12 106:17 165:2 257:22 277:9 **charge** 24:7, 8, 10, 11, 12, 18, 20 39:20 40:2 285:9 **charged** 24:8 25:6 **charges** 20:21 23:18 charging 21:6 25:4, 8, 16 39:11 42:21 43:8 56:8 Charlotte 4:20 143:5, 7, 14, 19, 20 144:11 145:2 Charlotte-Mecklenburg 143:4 Charlotte's 143:14 144:17 Charmley 9:1 **chasm** 192:8 cheaper 201:4 **check** 21:4 111:5 checkpoints 124:1, **chemical** 280:11 **chemist** 280:4, 11, **cherries** 188:20 cherry 188:21 Chevy 222:13 **Cheyenne** 238:*11* Chicago 98:22 258:11 259:12 Chicago's 144:16 **Chicken** 204:13 chief 38:14 115:17 **child** 32:5 191:8 197:*1* 198:*1* 199:21 childhood 229:5 242:4 children 34:14, 19 35:8 36:21 41:10, 13 44:20 47:22 95:21 96:21 99:5, 18, 19 100:16, 19 111:19, 22 112:6 149:15 150:4, 6

151:*14* 185:2 190:15 193:9 195:4, 11 199:16 213:13, 15 227:22 229:13 233:12 235:15 238:6 242:5 253:1, 2 256:16 268:15 269:9 283:3 children's 28:10 97:21 115:9 149:19 236:19 252:13 **China** 105:19 120:17 233:17 239:16 China's 120:12 **chip** 62:8 178:15 186:*11* **choice** 28:8 40:16 choices 28:9 40:14 142:9 choose 44:4 168:7 223:13 240:18, 19 **chosen** 221:8, 13 Christian 46:8 99:7 chronic 162:9 253:2 256:17 CHURCHILL 2:9 22:4 CINTHIA 4:3 110:4, 7 146:6, 9 **circle** 192:19 213:14 220:20 circular 79:15 85:17 circulation 79:12 **Citian** 277:11 cities 32:14 113:10 137:2 144:11 145:13, 18 162:1 212:3 275:4 278:13 279:11 **citizen** 19:21 22:21 38:11 59:15 90:18 103:6 136:20 143:6 159:9 165:2 169:6 191:1 209:18 224:3 233:9 241:8 252:14 267:3 Citizens 5:4 169:15 176:18 191:8 286:19 City 4:20 18:7 34:3 72:15, 18, 19 91:12, 21 97:1 114:5 115:4 144:4, 22 146:2 149:*16*

159:10 162:2

180:12 185:6, 8
193:21 197:2
245:10 267:16
274:5, 12, 14, 15
277:8, 20 278:3, 8,
14 279:7
city's 253:16
civil 72:14
CLAIRE 5:18 254:22 255:5
clamoring 36:18
clamp 262:3
Clare 189:6, 14
clarion 153:6
Clark 110:22
112:6
classes 161:19, 20
201:16
classified 234:11 classroom 198:2
Clawson 137:2
Clayton 167:20
Clean 3:3, 19 4:3,
4, 5, 22 6:8, 9, 12
9:16 10:14 11:2
12:11, 21 19:9
20:5 23:1 26:7
27:17, 19 29:11, 12
30:15 33:11, 12
36:4, 9, 22 42:16 59:18 61:6 63:3
59: <i>18</i> 61: <i>6</i> 63: <i>3</i> 69:2, <i>6</i> , <i>7</i> 74:2, <i>8</i>
75:3. 7 82:12
75:3, 7 82:12 83:13 87:11 88:14,
<i>19</i> 89:22 90: <i>1</i>
91:1 94:11, 14, 17
96:4 97:18 98:13,
16 100:9 110:9, 10,
13 111:3 112:9, 13,
19 113:8, 16 115:8, 20 116:6, 13
117:12 120:1
137:6, 19 138:14
140:7, 14 142:9
144:7 145: <i>16</i> 146: <i>1</i> 149: <i>12</i>
146:1 149:12
151:21 152:10, 16
153:22 154:6 156: <i>1</i> 2 158: <i>1</i> 7
159:12 162:22
163:7 166:11, 15
167:6, 8 175:2
176: <i>1</i> 180:5
184:20 185:2
187: <i>17</i> , <i>19</i> 189: <i>7</i>
190:9, <i>13</i> 192:7 193: <i>3</i> , <i>13</i> , <i>17</i>
193:3, 13, 17
194: <i>14</i> 196: <i>13</i> , <i>15</i> 198: <i>12</i> 199: <i>10</i>
201:13 206:15
207:3, 6 208:17, 19

3			
221.3 20 2 231:3 240:4 11 2 245:4 254:4 256:4 260:4 266:3	11, 21 16, 21 14 22 26:1 5 238 16, 17 44:2, 1 13 24 1, 3 2 4 257 18 26 3 267	228:3 :19 241: 18 6:3 55:12 :3 1:8	9,
280:0 282:8 18, 23 clean 30:13	1/ 2/ 6, 19 8, 12 l er 29 3 45:	9:15 281:7 284:1 :20 16 55	5:6
100:2 126:2 178:2 198:2 212:2	88:1 15 11 20 16 21 17 21 20 14, 16 4 285	5:6 6:7 9:3 7:19 214:	
clean 79:18 Clear 151:2 229:2	est 70 8 192 ning 18 19 17 23	: <i>13</i> 111: <i>10</i> 9: <i>7</i> 5: <i>10</i>	
40:9 61:13 152:1 155:3	9:11 46:3 81:1 16 15 3 191 14 20 21 26	53:1 13 12 3:6 :16	4
271:1 clear 50:12 208:2 255:1 clerg	10 ly 16: 2 136 21 22 14 y 121	:10 3 :12 3:10	35:2
click clicki Clima 19 5 11:10 20:1	102:2 ing 60 ate 2: :4 9:2 6, 18 21:20	21 0:20 :11, 16 13, 18 18:20 0 27:	'
21 2 31:5, 19 3 36:4, 15 4 45:2,	8:5 3 9 33 5:1, 5, 19, 22 2:4 4	0:19 :2 34 8, 16 2 41: 4:14,	4:8, , 19 3, 6, 22 5:2,
5, 7, 8 7, 21 53:1,	8 47:20 51:20 22 5	10 48 0 52: 5:2	3:6, 18

71:16 79:12 81:5,

16, 20, 21 82:12, 13 87:10, 14 91:8, 21 92:8 93:8 95:15 97:4, 6 99:9 111:17 112:7, 10, *17* 116:22 117:*14* 118:20 120:6 121:12 131:18 141:18, 22 145:6, *15*, *19*, *22* 146:*13* 148:7, 10 149:18 151:10, 19 152:10 153:2, 7, 10, 22 154:7 159:21 165:8 166:17, 20 167:1, 4, 10 188:2, 4, 10, 14 190:3, 5, 7, 12, 16 194:10 195:7, 12 198:19 199:1, 4, 6, 11 200:9, 12, 13, 16 201:2 206:18, 21 207:3, 5, 22 209:3 210:7 214:21 215:21, 22 216:7 217:11 219:3, 9, 11 221:16 224:8, 17, 21, 22 225:12, 21 226:6 228:5, 20, 22 229:14, 19 231:8 233:10, 14 235:4 236:11, 16 237:7 241:9 242:13 244:9, 10, 19, 22 245:12, 15 246:1, 6 252:21 253:22 254:4 255:11, 19 257:4 258:7 259:21 260:12 261:15, 19 262:1, 5, 12 264:3 267:12 269:4 278:5 280:4, 6, 14 281:9 282:12 283:2, 3, 6, 15 284:4, 6, 14, 19, 21 285:21 climate-disrupting 259:17 climate-induced 224:11 **climate's** 171:8 **climb** 181:9 271:5 clinic 267:4 clinical 35:7 close 16:19 44:1 47:3 67:13 69:22 73:11 86:22 111:5 117:14 118:7 121:4 141:10 142:12, 14 151:4

168:8 184:22 200:20 274:16 **closed** 96:22 closed-loop 85:19 closely 157:14 closer 109:16 212:17 214:6 closes 200:18 closest 32:19 189:11 208:4 **closing** 168:17 291:7 Club 3:16, 17 4:19 5:12, 14 106:18, 19 107:3 165:*1* 170:8 257:22 260:18 277:9 CO2 77:17 79:13 92:13 93:1, 4 233:20, 21 239:3, 9, 14, 17 coal 39:12 40:8 80:2 coal-fired 233:18 **Coalition** 3:3 61:7 250:4 252:15 260:19 263:12 coal-powered 208:10 Coast 5:5, 10 106:4 133:4 155:19 158:1, 10, 12 246:17 coaxing 229:7 **cobalt** 120:15 co-benefit 181:2 Co-Chair 115:21 Code 42:4 60:6 92:15 262:13 codes 278:6 coffee 25:5 cognition 35:12 **cognitive** 18:1, 14 **Cohesive** 127:19 cold 189:16 268:9 collaboration 85:16 86:16 117:15 148:13 **collapse** 181:14 235:3 colleague 225:5 **colleagues** 138:2, 6, 18 291:11 collective 61:14 171:13 **college** 197:15 208:14 Collins 34:2 color 32:18 42:17 99:14 109:13

137:22 141:17, 21 150:17, 18 163:3 217:14 256:22 259:3 268:22 275:2 Colorado 34:3 179:*20*, *21* 180:*9* COLUMBA 6:12 214:12, 15 Columbia 116:3 201:15 202:5 **Columbus** 94:18 96:22 **combat** 148:10 167:1 244:22 246:5 **Combating** 146:13 combination 157:13 combined 239:3 combining 148:18 combustion 10:12 38:21 42:8 53:2 57:17 60:1, 7 61:21 95:3 126:9 154:4 250:22 251:5, 9, 12 come 47:3 48:4 60:19 63:19 90:21 91:6 92:7 98:7 131:3 215:13 239:21 272:18, 22 273:2 274:19 280:22 comes 39:6 108:8 258:6 275:1 288:14 comfortable 225:10 comfortably 169:4 **coming** 47:15 77:11 109:19 177:12 259:19 273:4 274:20 280:19 281:13 **command** 66:11 commence 247:1 **commend** 61:*10* 84:11 **commends** 116:*11* commensurate 51:18 82:13 **comment** 19:14 22:3 26:14 31:17 33:18 37:2 39:17 40:20 44:7 48:12 52:4 54:11 58:3 60:10 63:9 64:21 68:16 71:18 75:16 80:15 83:22 86:22 87:2 90:12 92:21 93:3, 12 98:1

101: <i>19</i> 106: <i>10</i>
109: <i>21</i> 110: <i>3</i>
112:2 <i>1</i> 115: <i>11</i>
118:7, 8 121: <i>17</i>
125: <i>I</i> 128:2 131: <i>I6</i> 132:7 139: <i>I</i> 2 142:20
131: <i>16</i> 132: <i>7</i>
139: <i>12</i> 142:20
146:5 149:7 152:3
155:6 159:4 161:3,
16 163:19 167:14
170:3 172:18
177:2 179: <i>11</i>
181:17 187:2
190:18 192:18
195:21 200:2
201:7 205:4 209:8 211:14 214:11 216:12 219:15 223:16 226:21
211:14 214:11
210:12 219:13
230:13 231:14
235:18 237:17
240:21 243:3
246: <i>10</i> 250: <i>4</i>
251:2 <i>1</i> 254: <i>13</i>
257:17 262:17
266:14 269:16
272:1 276:19
279:20 283:19
287:6 289:13, 17
20,10 20,112,17
commented 21:8
commented 21:8 commenting 250:7
commenting 250:7 comments 13:10
commenting 250:7 comments 13: <i>10</i> 16:7 38: <i>11</i> 57:20
commenting 250:7 comments 13:10 16:7 38:11 57:20 62:20 64:15, 19
commenting 250:7 comments 13:10 16:7 38:11 57:20 62:20 64:15, 19 101:5, 7 118:6
commenting 250:7 comments 13:10 16:7 38:11 57:20 62:20 64:15, 19 101:5, 7 118:6 124:11, 20, 21
commenting 250:7 comments 13:10 16:7 38:11 57:20 62:20 64:15, 19 101:5, 7 118:6 124:11, 20, 21 127:22 128:1
commenting 250:7 comments 13:10 16:7 38:11 57:20 62:20 64:15, 19 101:5, 7 118:6 124:11, 20, 21 127:22 128:1 132:1 133:1
commenting 250:7 comments 13:10 16:7 38:11 57:20 62:20 64:15, 19 101:5, 7 118:6 124:11, 20, 21 127:22 128:1 132:1 133:1
commenting 250:7 comments 13:10 16:7 38:11 57:20 62:20 64:15, 19 101:5, 7 118:6 124:11, 20, 21 127:22 128:1 132:1 133:1
commenting 250:7 comments 13:10 16:7 38:11 57:20 62:20 64:15, 19 101:5, 7 118:6 124:11, 20, 21 127:22 128:1 132:1 133:1 134:16 136:9 195:17 217:8 246:21 272:5
commenting 250:7 comments 13:10 16:7 38:11 57:20 62:20 64:15, 19 101:5, 7 118:6 124:11, 20, 21 127:22 128:1 132:1 133:1 134:16 136:9 195:17 217:8 246:21 272:5 291:14
commenting 250:7 comments 13:10 16:7 38:11 57:20 62:20 64:15, 19 101:5, 7 118:6 124:11, 20, 21 127:22 128:1 132:1 133:1 134:16 136:9 195:17 217:8 246:21 272:5 291:14 commercial 177:14
commenting 250:7 comments 13:10 16:7 38:11 57:20 62:20 64:15, 19 101:5, 7 118:6 124:11, 20, 21 127:22 128:1 132:1 133:1 134:16 136:9 195:17 217:8 246:21 272:5 291:14
commenting 250:7 comments 13:10 16:7 38:11 57:20 62:20 64:15, 19 101:5, 7 118:6 124:11, 20, 21 127:22 128:1 132:1 133:1 134:16 136:9 195:17 217:8 246:21 272:5 291:14 commercial 177:14 Commission 143:5,
commenting 250:7 comments 13:10 16:7 38:11 57:20 62:20 64:15, 19 101:5, 7 118:6 124:11, 20, 21 127:22 128:1 132:1 133:1 134:16 136:9 195:17 217:8 246:21 272:5 291:14 commercial 177:14 Commission 143:5, 9 180:20
commenting 250:7 comments 13:10 16:7 38:11 57:20 62:20 64:15, 19 101:5, 7 118:6 124:11, 20, 21 127:22 128:1 132:1 133:1 134:16 136:9 195:17 217:8 246:21 272:5 291:14 commercial 177:14 Commission 143:5, 9 180:20 commitment 41:22 68:10 82:20 100:8 123:14 142:2
commenting 250:7 comments 13:10 16:7 38:11 57:20 62:20 64:15, 19 101:5, 7 118:6 124:11, 20, 21 127:22 128:1 132:1 133:1 134:16 136:9 195:17 217:8 246:21 272:5 291:14 commercial 177:14 Commission 143:5, 9 180:20 commitment 41:22 68:10 82:20 100:8 123:14 142:2 144:9 162:21
commenting 250:7 comments 13:10 16:7 38:11 57:20 62:20 64:15, 19 101:5, 7 118:6 124:11, 20, 21 127:22 128:1 132:1 133:1 134:16 136:9 195:17 217:8 246:21 272:5 291:14 commercial 177:14 Commission 143:5, 9 180:20 commitment 41:22 68:10 82:20 100:8 123:14 142:2 144:9 162:21 165:22 284:19
commenting 250:7 comments 13:10 16:7 38:11 57:20 62:20 64:15, 19 101:5, 7 118:6 124:11, 20, 21 127:22 128:1 132:1 133:1 134:16 136:9 195:17 217:8 246:21 272:5 291:14 commercial 177:14 Commission 143:5, 9 180:20 commitment 41:22 68:10 82:20 100:8 123:14 142:2 144:9 162:21 165:22 284:19 commitments
commenting 250:7 comments 13:10 16:7 38:11 57:20 62:20 64:15, 19 101:5, 7 118:6 124:11, 20, 21 127:22 128:1 132:1 133:1 134:16 136:9 195:17 217:8 246:21 272:5 291:14 commercial 177:14 Commission 143:5, 9 180:20 commitment 41:22 68:10 82:20 100:8 123:14 142:2 144:9 162:21 165:22 284:19 commitments
commenting 250:7 comments 13:10 16:7 38:11 57:20 62:20 64:15, 19 101:5, 7 118:6 124:11, 20, 21 127:22 128:1 132:1 133:1 134:16 136:9 195:17 217:8 246:21 272:5 291:14 commercial 177:14 Commission 143:5, 9 180:20 commitment 41:22 68:10 82:20 100:8 123:14 142:2 144:9 162:21 165:22 284:19 commitments
commenting 250:7 comments 13:10 16:7 38:11 57:20 62:20 64:15, 19 101:5, 7 118:6 124:11, 20, 21 127:22 128:1 132:1 133:1 134:16 136:9 195:17 217:8 246:21 272:5 291:14 commercial 177:14 Commission 143:5, 9 180:20 commitment 41:22 68:10 82:20 100:8 123:14 142:2 144:9 162:21 165:22 284:19 commitments 27:21 82:17, 22 130:17 218:15 241:18 254:4
commenting 250:7 comments 13:10 16:7 38:11 57:20 62:20 64:15, 19 101:5, 7 118:6 124:11, 20, 21 127:22 128:1 132:1 133:1 134:16 136:9 195:17 217:8 246:21 272:5 291:14 commercial 177:14 Commission 143:5, 9 180:20 commitment 41:22 68:10 82:20 100:8 123:14 142:2 144:9 162:21 165:22 284:19 commitments 27:21 82:17, 22 130:17 218:15 241:18 254:4 commits 144:18
commenting 250:7 comments 13:10 16:7 38:11 57:20 62:20 64:15, 19 101:5, 7 118:6 124:11, 20, 21 127:22 128:1 132:1 133:1 134:16 136:9 195:17 217:8 246:21 272:5 291:14 commercial 177:14 Commission 143:5, 9 180:20 commitment 41:22 68:10 82:20 100:8 123:14 142:2 144:9 162:21 165:22 284:19 commitments 27:21 82:17, 22 130:17 218:15 241:18 254:4 commits 144:18 committed 13:6
commenting 250:7 comments 13:10 16:7 38:11 57:20 62:20 64:15, 19 101:5, 7 118:6 124:11, 20, 21 127:22 128:1 132:1 133:1 134:16 136:9 195:17 217:8 246:21 272:5 291:14 commercial 177:14 Commission 143:5, 9 180:20 commitment 41:22 68:10 82:20 100:8 123:14 142:2 144:9 162:21 165:22 284:19 commitments 27:21 82:17, 22 130:17 218:15 241:18 254:4 committed 13:6 66:19 68:2 81:4
commenting 250:7 comments 13:10 16:7 38:11 57:20 62:20 64:15, 19 101:5, 7 118:6 124:11, 20, 21 127:22 128:1 132:1 133:1 134:16 136:9 195:17 217:8 246:21 272:5 291:14 commercial 177:14 Commission 143:5, 9 180:20 commitment 41:22 68:10 82:20 100:8 123:14 142:2 144:9 162:21 165:22 284:19 commitments 27:21 82:17, 22 130:17 218:15 241:18 254:4 commits 144:18 committed 13:6 66:19 68:2 81:4 84:18 85:15
commenting 250:7 comments 13:10 16:7 38:11 57:20 62:20 64:15, 19 101:5, 7 118:6 124:11, 20, 21 127:22 128:1 132:1 133:1 134:16 136:9 195:17 217:8 246:21 272:5 291:14 commercial 177:14 Commission 143:5, 9 180:20 commitment 41:22 68:10 82:20 100:8 123:14 142:2 144:9 162:21 165:22 284:19 commitments 27:21 82:17, 22 130:17 218:15 241:18 254:4 committed 13:6 66:19 68:2 81:4

146: <i>16</i> 147: <i>11</i>
Committee 115:21
common 29:3
104:2 118:22 204: <i>14</i> 253: <i>1</i>
communications
45:7
communities 30:21
32:18 33:12 42:16,
<i>17</i> 75:8 81:5 83: <i>3</i> ,
<i>15</i> 87:21 88:3, <i>1</i> 2,
13 89:21 90:4
96:2 99:13 117:6
121.9 141.18 20
121:9 141:18, 20 142:15 143:21 145:17 150:18 151:6, 7 154:8, 11
1/5:17 150:18
151:6 7 154:8 11
162:8 163: <i>4</i>
165: <i>17</i> , <i>18</i> 166: <i>3</i>
169:18 181:8
185: <i>13</i> 186: <i>19</i>
189:22 194:11, 13
208:1, 3 209:1
210:12 212:3, 15,
<i>21</i> 214:9 216: <i>4</i>
217: <i>13</i> , <i>14</i> 219: <i>12</i>
228:4, 5 229:2 245:16 253:17 256:22 259:4
245:16 253:17
256:22 259:4
community 99:17
113:12 149:19, 22
150:16 162:18
168: <i>14</i> , <i>19</i> 169: <i>5</i>
180:3, 4, 5, 10
181: <i>3</i> , <i>4</i> 191:2 <i>1</i>
193:11 208:11
210:8 228:15
229:12 238:10
245: <i>11</i> 255: <i>20</i> 267: <i>6</i> 283: <i>15</i>
285:8
community's 216:1
Commute 144:15
companies 54:21,
22 55:7, 13 85:14
105:12 120:18
218:16 263:13
282:10
Company 2:17
5: <i>3</i> 38: <i>14</i> 39: <i>1</i>
85: <i>18</i> 120: <i>14</i> 146: <i>11</i> , <i>14</i> 170: <i>12</i>
146:11, 14 170:12
177:13 270:8
compared 23:14
74:11 86:11 99:18
130:15 265:9
compelled 20:13
69: <i>11</i>
compelling 63:10
1 0

competitive 55:3
84: <i>14</i> 166: <i>10</i>
277:17 279:14
competitors 89:16
complement 42:19
complementary
122: <i>17</i> , <i>21</i> 124:7
127:19
complete 24:7 67: <i>4</i>
completed 274:12 Completely 18:20
complex 29:18
Compliance
146: <i>11</i> 147:20
complied 203:12
complete 203.12
44:3 50:3
component 18:2
63:20 85:6 137: <i>18</i>
components
116: <i>19</i> 124: <i>1</i>
composed 172:12
composed 172:12
compounds 03.17
56: <i>12</i> 127: <i>5</i>
144:13
comprise 81:3
comprise 61.3
33:7 74: <i>17</i> 123: <i>19</i>
Compton 197:2
concentrated
253:15
concern 72:21
150:8 179:8
Concerned 2:20
6:17, 18, 19, 20, 21
17:11 41:10 48:17
67:15 72:22
141:17 149:17
161:18 168:4
177:17 221:6
223:22 230:15
277:10
concerning 14:9
concerns 50:13
170:2 224:3
conclude 291: <i>16</i>
conclusion 31:5
43:21 71:12
156:21 176:10
208:19 240:9
concrete 233:19
234:1
condition 18:1
253:2 267:21
conditioning 34·16
147:22 189:8
213:9
conditions 56:14

199:5 267:15, 16 268:21 **condone** 19:10 conduct 50:8 168:6 conducted 13:19 173:2*1* conducting 12:20 conducts 174:4 Conference 52:9 confident 172:7 **confined** 34:*15* confirmed 156:22 confirming 86:6 **confirms** 85:9 86:9 congregations 81:2, Congress 179:1 203:14 204:1 278:18 Congressman 81:10 **connect** 215:*17* connected 15:17 33:13 37:10 58:11 76:2 102:5 128:10 135:13 164:5 183:16 205:12 231:22 247:18 Connecticut 115:17 170:8 connection 17:22 99:22 181:6 CONNIE 7:5 249:14 conscience 81:4 118:19 237:5 conscious 77:16 137:16 consequences 35:9 41:15 53:15 82:7 191:17 262:12 271:15 275:6, 10, 13 Consequently 125:22 Conservation 6:2 152:11 179:22 206:10 Conservatively 143:17 consider 12:10 40:16 121:7 132:3 148:5 240:13, 15 250:21 258:18 consideration 64:18 127:22 considered 17:18 18:15 20:12 158:*15*

considering 10:13 75:13 205:1 224:6 consistent 12:10 63:2 66:1 218:10, consistently 176:12 244:4 constant 48:5 constantly 197:3 constituents 137:7 168:21 constitutional 44:19 constraints 66:8 construction 28:16 105:3 114:7 212:11 **consult** 176:18 consultant 227:19 Consultation 173:22 174:4 consumed 62:4 Consumer 3:4 4:18 19:22 26:3 65:12 66:15 74:3 122:18 124:2 131:*1* 140:5, *13* 142:6 consumers 20:7 21:11 23:3 25:9, 18 59:20 70:9 73:10 75:4 140:14 141:6 142:9, 18 159:16 166:13 168:11 169:16 171:21 172:10 175:9 207:7 208:21 219:5 consumption 39:3, 21 contact 15:2 248:16 contains 145:7 165:9 contemplated 70:17 contemporary 228:15 content 85:2 174:9 continue 13:4 51:22 61:21 73:22 100:1 126:19 134:9 136:4 145:8 149:2 158:7 165:10 181:9 195:11 222:22 240:3 262:1 265:16 279:2, 11, continued 21:13 49:8 66:10 70:19

73:1 162:9 189:17

85:13 86:15 105:2

130: <i>17</i> 157: <i>3</i> , <i>21</i>
279:5
continues 194:5
199:6
continuing 55:18
124:6 126:22
124:6 126:22 277:16 282:17 Contra 3:18
contractor 8:8, 16
14:11 134:8 247:7
273:10
contribute 20:3
62:20 117:7 156:5,
11 169:5 244:8
contributes 114:21 contributing 21:14
64:7 153:7, <i>15</i>
265:5 285:21
contributor 96:12
116:22
control 66:11
116: <i>1</i> 224:2 225: <i>1</i> 244: <i>13</i>
controllable 285:4
controls 63:4
244: <i>1</i>
convenient 56:10
Convention 46:7
conversations
148: <i>15</i> 180: <i>20</i> convince 52: <i>21</i>
convincing 52:15
Cook 259:13
COOKE 2:20
48:13, 16
cooking 189: <i>16</i>
cool 189: <i>19</i> coolest 188: <i>11</i>
COOPER 3:4
64:22 65:4, 6, 9, 11
cooperate 237:2
cooperation 14:14
coordinated 124:17
coordination 57:7,
22 122:22 Coordinator 165: <i>1</i>
COP 46:14 48:8
COPD 267:15
coping 35:18
Corn 4:16 129:18,
21 130:6, 16
228:17 229:7
corner 170:9 197:2
corners 29:15
286:12
cornfields 228:12 corporate 47:21
corporate 47:21
50:18 57:8, 21
corporations 237:4,
5

correct 66:3	covering 30:3
207:12	268:17
correspondence	covert 157:17
63:17	COVID 82:10
corridor 212:6	181:7 201: <i>14</i>
corridors 253:16	223:10 268:18
cost 11:9 23:11,	269:7 275:16
15, 16 24:11 43:18	cow 203:18 create 87:10 9
68:4, 9 85:6 120:22 131: <i>1</i>	114:2 122: <i>18</i>
163: <i>10</i> 175:9, <i>16</i>	152:20 192: <i>13</i>
176: <i>14</i> 251: <i>3</i>	193:8 199:9 2
Costa 3:18	241:12 262:4
costs 23:7, 9, 20, 21 26:3 68:6 75:6	241: <i>12</i> 262: <i>4</i> 271: <i>18</i> 279: <i>4</i> created 156: <i>15</i>
26:3 68:6 75:6	created 156:15
120:2 204:19	264:12
224:14 268:17	creates 114:7
Council 3:6 69:3	199: <i>4</i>
88:22	creating 42:20
Counsel 9:4	47:8, <i>12</i> 138: <i>3</i>
counterproductive	147:12 195:8
177:18	242:15 279:14
counting 190:15	Creation 44:13
countless 48:19	48:5 53:6 163
countries 40:4 105:19 120:11	166:14 266:9
138:8 166:6	creative 120:9 creatures 33:3
country 21:12, 16	256:6
47:11 83:20	credit 29:18 4
106:21 110:21	50:12 60:4 12
111: <i>1</i> 119: <i>11</i>	157:20 242:15
121:12 125:9	crediting 265:4
147:9 152: <i>14</i>	credits 49:16
166:7 167: <i>11</i>	<i>3, 15</i> 119:9 14
178: <i>3</i> 186: <i>12</i>	265:13, 14, 19
211:8 212:3 218:8,	266:4, 7
12 260:10, 11	Creek 193:20
276:17 285:1, 13	crew 38:17
286:19	cries 53:17
country's 199:17	crises 171:10
County 38: <i>13</i> 110:22 112: <i>6</i>	255:8
110:22 112:0 197:6 243:9 245:7,	crisis 9:13 11: 20:1 45:1, 18
197.0 243.9 243.7,	47:11 48:7 81
259:13	91:8 148:7 15
couple 25:4 48:20	190:16 195:12
183:7 215: <i>13</i>	210:7 221:16
249:12 276:22	224:9, 19, 21 2
coupled 39:18	228:20 236:11,
89:7 105:2 245:21	244:9 246:6
Coupling 89:19	255:11 260:12
course 8:22 32:16	262:5 281:9 2
51:17 65:20 91:7	criteria 116:20
105:11 171:2	131:9 158: <i>3</i> , <i>1</i> 3
248:17 258:18	165: <i>16</i> 218: <i>4</i>
259:2 288:8, 9	251: <i>17</i>
court 16:10 136:12 courts 65:19	critical 27:15 55:12 57:12 8
cover 30:8	88:7, 15 89:1
covered 189:5	95: <i>14</i> 116: <i>19</i>
213:3 286:7 291:6	137:18 146:22
213.5 200.7 271.0	137.10 170.22

covering 30:3
268: <i>17</i>
covert 157:17
COVID 82:10
181:7 201: <i>14</i> 223: <i>10</i> 268: <i>18</i>
269:7 275:16
cow 203:18
create 87:10 90:6
114:2 122: <i>18</i> 152: <i>20</i> 192: <i>13</i>
193:8 199:9 201: <i>1</i>
241: <i>12</i> 262: <i>4</i>
271: <i>18</i> 279: <i>4</i>
created 156:15
264: <i>12</i> creates 114: <i>7</i>
199: <i>4</i>
creating 42:20 47:8, 12 138:3
47:8, <i>12</i> 138:3 147: <i>1</i> 2 195:8
147:12 195:8 242:15 279:14
Creation 44:13
48:5 53:6 163:10
166:14 266:9
creative 120:9
creatures 33: <i>3</i> 256: <i>6</i>
credit 29:18 49:14 50:12 60:4 126:11
50:12 60:4 126:11
157:20 242:15 crediting 265:4
credits 49:16 50:1,
<i>3</i> , <i>15</i> 119:9 141: <i>12</i>
265:13, 14, 19
266:4, 7 Creek 193:20
crew 38:17
cries 53:17
crises 171:10
255.8
crisis 9:13 11:16 20:1 45:1, 18 46:2
47: <i>11</i> 48: <i>7</i> 81: <i>21</i>
91:8 148:7 153:2
190:16 195:12
210:7 221: <i>16</i> 224: <i>9</i> , <i>19</i> , <i>21</i> 226: <i>6</i>
228:20 236:11, 21
244:9 246:6
255:11 260:12
262:5 281:9 283:3
criteria 116:20 131:9 158:3, 13 165:16 218:4 251:17
165:16 218:4
251:17
critical 27:15
55:12 57:12 85:6 88:7, 15 89:1
95: <i>14</i> 116: <i>19</i>
127.18 146.22

102:13 202:12
162:13 202:12 225:8 242:7 254:10 257:8 284:11
254:10 257:8
284:11
critically 77:8
critically-reviewed
86:9
crops 188:20
256:7
cross 192:8
crucial 36:5 56:10
67:2
Cruise 137:10
crumbling 260:7
crush 203.9
crush 203:9 CRV 230:18
cry 83:15 195:2
crystal 191: <i>16</i>
culprit 187:21
culprit 107.21
cultural 227:19
culture 170:16
cumulative 157:20
CUNY 6:22 232:17, 20, 22
232:17, 20, 22
233:4, 6, 7
curb 35:3 197:19 cure 229:11 287:2 current 41:2 50:2 51:11 65:22 71:14
cure 229:11 287:2
current 41:2 50:2
51:11 65:22 71:14
82: <i>15</i> 119: <i>7</i> . <i>16</i> . <i>18</i>
157: <i>1</i> 2 161: <i>1</i> 3 177:20 225:6
177:20 225:6
235:3 287:8
currently 16:3
22:5 26:16 37:19
38.20 49.22 59.3
38:20 49:22 59:3 76:18 80:17 93:14
05.22 121.10
95:22 121: <i>19</i> 129:2 136: <i>5</i> 139: <i>14</i> 153: <i>12</i>
129:2 130:3
139:14 153:12
155:8 166:5
172: <i>13</i> , <i>20</i> 181:2 <i>1</i>
182: <i>13</i> 187: <i>4</i>
201:14 216:14
219:17 224:1, 10
227:1 232:14
233:21 247:7
249.13 250.12
252:1 254:14 262:18 265:22 273:11 290:7
262:18 265:22
273:11 290:7
currents 104:5
curtailed 245:14
curves 71:3
customer 56:11
95:8
customers 56:10
147:3 151:5 207:8
4 00 14 40 10
cut 29: <i>14</i> 40: <i>13</i> , <i>14</i> 42: <i>1</i> 45:22

154:10 158:7

47:17 129:22 236:13 244:15 256:8 257:12 266:5 286:12 cuts 131:2 225:13 **cutting** 50:17 69:9 130:4 263:14 **cyber** 79:5 cycle 86:11 268:12 269:2 **CYNTHIA** 4:21

< D > **D.C** 1:22 193:5, 21 196:14 204:11 **dads** 110:11 **daily** 11:17 209:22 260:3 267:13 **Dallas** 233:8 **damage** 18:12 49:4 229:4 **damaged** 99:14 226:3 damages 82:6 **damaging** 21:*13* **damned** 271:15 **Dan** 81:10 **DANA** 7:10 266:15 267:1 DANG 6:11 209:9, 12, 17 **danger** 104:9 194:9 dangerous 18:8 30:20 33:14 82:9 108:10 198:14, 15 203:15 212:18 213:1, 11 214:8 255:17 268:10 dangerously 47:16 82:15 **DARIEN** 5:2 152:4, 9 **DARIN** 3:17 257:18, 21 darkness 47:19 data 52:1 63:10 141:19 143:13, 14 173:20 253:12 data-driven 86:19 date 19:4

dating 95:1 daughter 42:12 96:16 113:18 215:4, 7

196:16

daughters 151:*13*

daughter's 215:12 **DAVE** 2:20 48:13,

16 David 272:20 DAVIES 7:2 248:10 277:1, 4, 6, 7 DAVIS 5:2 152:4, 7, 9 day 8:14 9:20 18:7 48:4 91:13, 14, 18 97:2 99:1
111:9 115:2, 3 152:18 181:1 185:7 186:10 193:22 208:12 253:4, 6, 8 days 9:9 13:11, 18 18:8 34:9 48:20 52:15 82:3 91:16 99:6 114:9 151:3 153:17 189:6 194:3, 7 200:17 219:8 231:2 245:8
258:9 285:17 day-to-day 107:7 dead 256:5 deadlines 244:4 deadly 21:15 63:21 91:12 108:2 245:1 deal 200:1 dealer 43:16 dealers 178:2 dealership 170:14
dealt 103:9 Dearborn 59:15 death 203:1 204:5 229:3 233:13 237:10 275:18 deaths 18:12 21:16 46:1 91:21 105:14 181:7 219:4 DEB 2:15 33:19 34:2 122:8
DEBORAH 4:11 122:5 debuting 264:16 decade 11:4 17:21 19:6 51:16 62:10 65:20 89:4 141:14 145:12 188:15 decades 47:16 95:6 137:11 169:19 188:11 204:8 225:15
239:11 270:12 decarbonization 16:21 84:12 decarbonize 62:1 130:12

decarbonizing
251: <i>12</i>
decide 274:10
decidedly 239:20
deciding 176:21
decimate 188:22
decision 47:3 171:19
decision-making
17: <i>19</i>
decisions 18:16
103:18 236:15
256: <i>13</i>
decisively 36:7 195: <i>13</i>
declines 18:14
decrease 275:16
decreases 275:8
dedicated 116:5
209:20
dedicates 107:3
deemed 13:22 deep 33:17 90:6
deeply 149:17
161: <i>18</i>
default 251:16
defended 65:22
261: <i>11</i>
Defense 3:6 6:15 69:3 88:22 217:3
defined 271:10
definitely 259:21
definitions 49:20
degrades 36:20
degrees 91: <i>14</i> 210: <i>18</i> , <i>19</i> 225: <i>14</i>
255:15 260:4
delay 29:19
156: <i>15</i> 158: <i>12</i>
204:9, 11 257:5
281: <i>1</i>
delicate 39:22
delineate 271:16 delirium 211:6
deliver 20:7 23:3
59:19 70:5 74:14,
<i>18</i> 75: <i>1</i> 90:2
133: <i>1</i> 134: <i>15</i> 138: <i>15</i> 140: <i>16</i>
138: <i>15</i> 140: <i>16</i> 159: <i>15</i> 178: <i>12</i>
159:15 178:12 delivering 168:16
delivers 117:17
delivery 264:14
Delta 98:9
demand 38:16
56: <i>11</i> 64: <i>11</i> 79:6
86: <i>13</i> 122: <i>18</i> 127: <i>9</i>
demands 95:8, 10
153:3

dementia 18: <i>4</i> 275: <i>15</i>
democracy 173: <i>17</i> 176: <i>17</i>
Democrats 175:1, 6, 14 176:8
demonstrate 142:3
demonstrated 68:10
demonstrating
168: <i>19</i> 266: <i>8</i> densely-populated
113:22
denser 144: <i>14</i> dental 75: <i>14</i>
Denver 18:7
179:20 denying 99: <i>16</i>
Department 115: <i>17</i> 138: <i>1</i>
253:7, 12
depend 147: <i>4</i> dependence 175:2 <i>1</i>
depending 282:4
depends 199: <i>18</i> 256: <i>13</i>
deployed 70:16
deploying 90:9 deployment 49:10
70:19 88:19 118:4
127: <i>18</i> 264: <i>5</i> , <i>19</i> depreciation 60: <i>5</i>
depression 18: <i>14</i>
35:9 269:6 Deputy 2:2 155:18 derives 85:13
derives 85:13 describes 35:2
Desert 73:8
113: <i>12</i> 114: <i>5</i> , <i>14</i> deserts 168: <i>17</i>
deserve 33:12
41: <i>15</i> 73: <i>3</i> 131: <i>12</i> deserves 51:8
286:2 <i>1</i>
design 67:11 86:10 95:9 148:5
designed 139:7 234: <i>12</i>
desperately 30:14
Despite 69: <i>15</i> 175: <i>20</i>
destroyed 256:8
268:6 destroying 202:10,
12 destruction 225:19
229:3
detailed 63:8 64: <i>19</i> 86: <i>21</i> 118: <i>6</i>
131:22 159:3

details 117:20
1/4:8
determinants
161:15 163:2
determine 142:8
determined 217:18
Detroit 81:22 82:2 137: <i>3</i> , <i>10</i>
149: <i>14</i> , <i>22</i> 150: <i>4</i>
151:1, 14
devastated 228:11
devastating 45:17 46:12 47:13 202:11 260:1 develop 12:4
46:12 47:13
202:11 260:1
develop 12:4
52:21 85:18 95:13
108: <i>1</i> 148: <i>6</i>
developed 62:17
117:14 239:12
developing 79:4
111:20 123:12
125:18 127:12
148:17
Development 3:3 25:21 35:13 61:6 74:4 84:22 117:8
74·4 84·22 117·8
123:15 127:13
143:16 144:14.19
166: <i>14</i> 169: <i>20</i>
develops 213:9
devoid 271:19
diagnosed 210:9
dial 76:21 129:5
182:3
dialed 58:14 65:8
72:1, 2 76:5 93:17 102:8, 11 121:22
102:8, 11 121:22 128:13 135:16 164:8 184:8
120.13 133.10 161.8 181.8
205:15, 18 232:3, 6
247:21 249:2 17
247:21 249:2, 17 252:4 254:18
dialing 22:8 26:20
dialing 22:8 26:20 37:22 38:1 58:17
72:3 76:8 93:17
94: <i>1</i> 102: <i>11</i> 122: <i>1</i>
128: <i>16</i> 132: <i>13</i>
135· <i>1</i> 9 164· <i>11</i>
155.17 101.11
173:1 184:12
173:1 184:12 205:18 216:17
128:16 132:13 135:19 164:11 173:1 184:12 205:18 216:17 227:4 232:6 248:2
249:3, 18 252:5
249:3, 18 252:5 254:19 263:1
249:3, 18 252:5 254:19 263:1 266:16 287:12
249:3, 18 252:5 254:19 263:1 266:16 287:12 Diana 251:22
249:3, 18 252:5 254:19 263:1 266:16 287:12 Diana 251:22 dictates 199:19
249:3, 18 252:5 254:19 263:1 266:16 287:12 Diana 251:22 dictates 199:19 die 99:19 112:2
249:3, 18 252:5 254:19 263:1 266:16 287:12 Diana 251:22 dictates 199:19 die 99:19 112:2 died 91:16 256:6 dies 253:8
249:3, 18 252:5 254:19 263:1 266:16 287:12 Diana 251:22 dictates 199:19 die 99:19 112:2 died 91:16 256:6

28:3 253:20 differ 174:6 difference 23:16 39:2 107:13 130:9 231:4 274:17 different 22:6 26:18 37:21 76:19 80:18 93:15 103:18 121:21 129:4 139:16 155:9 172:21 173:7 177:6 182:*1*, 8 187:6 196:3 216:15 219:18 220:2 227:2 248:22 249:9, 16 252:2 254:16 262:20 282:8 **difficult** 229:15 269:3 difficulties 15:19 37:12 58:18 76:9 102:12 128:17 135:20 164:12 183:18 205:19 220:16 232:7 248:3 287:19 289:2 diffusion 71:3 DiFrancesco 22:20 dig 229:9 **diligence** 238:*13* diminished 188:16 260:12 **dioxide** 78:12 143:18 171:18 175:4 181:4 282:3, 14.15 dire 41:14 91:7 97:*3* **direct** 150:22 151:10 181:6 directed 9:20 **direction** 9:11, 15 66:8 111:12 112:16 207:12 208:15 215:20 223:3 254:2 264:8 271:11, 16 284:17 **directly** 50:17 79:16 125:9 153:7 165:16 212:4 213:13 224:20 267:13 **Director** 2:4 8:18 16:16 61:6 65:11 69:1 80:22 84:5 118:13 122:9 140:5 146:10

173:*15* 179:2*1*

250:3 257:22 263:8 Directors 209:18 dirty 33:7 96:5 143:22 150:19 154:12 163:5 216:4 267:10 274:11 disaster 51:11 52:18 224:17 240:8 287:3 disasters 79:5 224:11, 14 225:1 262:1 269:4 disconnected 281:19 discourages 265:2 discovered 24:17 discriminatory 142:4 disease 150:8, 11, 15, 21 208:6 245:3 diseases 82:10 166:17 211:4 disincentive 171:6 disincentives 59:22 **disorders** 35:10, 11 disparities 87:22 96:*1* 150:20 216:5 displaced 237:11 displacement 236:20 displayed 16:3 136:5 248:8 disposal 88:8 disproportionate 87:19 96:3 141:21 143:22 150:19 154:12 163:4 216:4 245:12 disproportionately 42:17 99:14 217:13 256:21 259:5 276:8 disproportionately=i **mpacted** 189:21 disproportionatelyimpacted 117:6 disregard 53:15 disregarded 64:16 **disrupt** 190:6 disrupting 190:5 disruption 171:8 disruptions 79:6 distraught 42:13 distributed 14:17 42:21 253:14 **District** 5:6, 11 97:1 116:3 137:2 155:20 **Division** 180:9

DOCKET 1:7 10:22 16:7 136:9 docks 271:7 doctor 28:6 215:9 267:3 **doctors** 18:18 documentation 159:11 documents 10:20 dodge 234:10 **DODIE** 2:21 52:5, 8 doing 47:10 53:21 67:7 68:2 148:17 160:3 178:7, 16 204:13 214:2 236:13 261:5, 21 262:2, 11 268:4 269:13 278:9 280:12, 22 284:5 dollar 210:16 224:17 dome 34:12 256:7 domestic 85:15 89:2, 8 117:7 218:19 219:6 dominance 251:9 **dominant** 263:22 door 132:4 doors 189:15 234:14 DOROTHY 6:9 196:1, 6, 9 **DOT** 17:17 143:14 **double** 145:8 165:10 242:3 265:13 **doubt** 106:3 **DOUG** 3:15 61:5 90:13, 17 DOUGLAS 3:3 60:11 downpayment 180:16 downpours 260:1 downtown 197:16 dozens 171:20 201:22 **DR** 6:17 27:5 33:22 65:4, 6, 9, 11 140:2, 4 266:21 267:1 273:21 280:2 284:1 **draft** 81:8 83:13 119:7, 16, 19 dramatic 66:7 69:15 123:22 218:3

dramatically 20:2

drastic 225:20

drastically 47:5, 18 151:1 160:6 181:8 dream 115:3 137:10 dreams 149:5 **DREHSEN** 6:18 220:7 230:6, 8, 10, 14 driest 113:10 drink 203:6 240:16 drinking 226:2 drive 23:12 24:5 26:1, 3 28:5 29:10 30:5 32:3 62:9 74:2 86:17 88:12 90:2 120:20 127:*1* 168:13 177:21 178:13 197:15 251:1 253:21 257:10 driven 78:22 88:13 driver 43:14 170:17 **drivers** 145:18 154:9 204:18 231:7 drives 138:13 234:8 drivetrains 265:21 driving 20:15 21:4 68:4 84:19 185:8 197:17 222:8 285:3, 10 drought 73:6 104:7 108:19 224:12 225:19 droughts 53:14 260:6 drove 20:10 dual 24:6 due 34:4 39:10 42:4, 7 79:6 88:5 92:19 100:17 130:15 151:3 162:3, 11 196:18 225:19 245:9 255:10 259:14 dues-paying 106:21 **duped** 105:7 duplicate 201:20 **DURANTE** 3:3 60:11, 14, 17, 22 61:4, 5 duration 14:2 **Dureches** 228:11 dust 73:7 114:7 **dustiest** 113:10 **duties** 40:5 **Duty** 2:4 30:18

dwellers 25:13 **Dynamics** 270:16 < E > **E85** 250:7, 10 earlier 11:19 12:8 50:22 81:9 177:3 192:19 202:5 218:11 235:19 early 20:9 42:2 123:12 153:19 178:5 197:12 earn 210:16 earned 265:14 earning 186:17 earth 53:12, 13, 16, *17* 54:2 73:4 83:5, *16* 161:*12* 191:9 206:22 211:21 225:13 Earthquakes 53:14 73:5 easier 100:14 easily 198:5 207:8 east 79:16 104:8 133:4 197:1 246:17 283:8 Eastern 247:8 256:2 273:11 easy 65:15 103:12 185:20 204:4 274:11 eat 203:15 eating 189:16 ECKMAN 6:6 187:*3* Eco 111:3 228:2 286:14 eco-focused 123:4 EcoMadres 110:9 economic 68:3 84:18 87:14 109:1 117:8 163:10 166:13 170:10 171:5 177:17 266:11 economy 25:19 55:3 57:9, 22 73:19, 22 74:3 85:17 86:20 87:12 89:11 99:15 100:7 124:18 131:7 146:1 148:4 159:19 160:1 162:20 165:21 167:11 170:17 242:12 256:10 economy-wide 125:15 154:21 ecosystem 137:14

ecosystems 236:21 **EDF** 217:5 218:6 edge 106:6 263:14 268:2, 3 edges 189:15 Edison 129:19 **EDUARDO** 6:13 216:13 educating 214:21 educator 32:2 98:8 149:15 150:6 227:20 effect 39:14 45:20 51:4 251:7, 8 256:18 effective 85:7 169:11 185:9 186:5 246:4 261:9 291:12 effectively 168:8 effects 11:17 18:11 19:12 35:8 85:7 109:14 149:17 174:21 194:19 223:10 226:8 235:4 267:12 269:8 274:13 efficiencies 61:15 124:18 efficiency 31:13 39:7, 18 62:21 67:10, 17, 22 77:17 78:15 79:9 86:3 107:15 108:7 131:3 160:6 168:4, 6 172:3 174:3 175:11 176:2, 5, 10, 22 241:18 242:17 244:16 245:20 254:8 278:21 efficient 35:22 39:10 40:6 62:12 67:6 77:21 84:13 86:17 98:17 162:15 169:2, 8, 16 207:9 221:22 222:7, 8, 10, 15, 20 223:4 225:7 226:16 235:14 238:19 242:9, 22 265:17 effort 50:8 84:11 109:20 291:3, 9 efforts 22:22 29:21 41:13 54:6 56:4 61:15 69:6, 8 112:3 197:19 239:15 244:17 **EGBERT** 5:13 167:15, 18, 20

eight 71:6 78:22
81:15 174:22
200:7 224:16 233:21 264:5
EISA 66:6
either 28:19 46:21
51:3 94:1 104:15
196:2 261: <i>1</i> 6
elderly 168:17
196:2 261:16 282:3, 7 elderly 168:17 213:21 267:7
election 46:6 Electric 5:3 20:14
21:1, 3, 9, 11 23:6,
22 24:15 25:22
28:6 31:3 35:22
39:7 53:2 55: <i>16</i> ,
59:16 60:3 61:13
66:18 67:9 70:16
17, 22 57:2, 3, 17 59:16 60:3 61:13 66:18 67:9 70:16 79:22 86:5, 7 97:12 104:17
97:12 104:17 109:8 119:12, 15,
16 121:2 123:5, 10
137:21 140:9
146:21 147:7
148: <i>1</i> , 20 162: <i>15</i> 172: <i>14</i> 185: <i>14</i> , <i>15</i>
186: <i>14</i> 207: <i>13</i>
222:1, 5 225:8, 11 226:17 234:2, 3
226:17 234:2, 3
236:14 242:9 243:17 257:14, 15 259:8, 18 260:20
259:8, 18 260:20
261:2 263:13, 17
264: <i>14</i> , <i>21</i> 265: <i>21</i> 270: <i>8</i> , <i>15</i> , <i>22</i>
electrical 67:16
109:6 281:8
electricity 23: <i>15</i> 67: <i>12</i> 79: <i>19</i> , 22
80:6 122:20 151:3,
8 206:19 226:4
250:17 268:8
276:5 280:20 281:11
electrification 26:2
55:8, 11 56:21
70:21 74:5 85:5 122:14 123:21
124:4, 14 126:7, 21
127:15 147:1, 11,
12 148:11 159:1 180:19 251:2
264:2 265:12
266:12
electrified 10: <i>12</i> 55: <i>15</i> 123: <i>3</i> , <i>4</i>
125:20 166: <i>16</i>
276:5

•
electrify 251:7 276:3 282:22
electrifying 50: <i>13</i> 80: <i>11</i> 147: <i>5</i> 281: <i>6</i> ,
10, 12 electronically 13:15 electronics 231:1
elementary 32:2 98:20
elements 66:12 148:8 281:17, 21 elicited 175:4
eliminate 20:7 23:3 36:11 40:10 42:15 50:10 59:20
91: <i>4</i> 100: <i>5</i> 132:2 159: <i>17</i> 160: <i>8</i>
217: <i>11</i> 219: <i>1</i> eliminated 43:9 eliminates 74:2 <i>1</i>
eliminating 51: <i>14</i> 155:2 167:2 218: <i>12</i>
elimination 266:6 ELIZABETH 6:8
187: <i>13</i> , <i>14</i> , <i>16</i> eloquence 236: <i>10</i> email 248: <i>4</i> , <i>6</i>
269:19 272:10 287:20 289:2 e-mail 15:20, 22
37.13 15 58.19 21
76:10, 12 101:15 102:13, 15 128:18, 20 135:21 136:1 164:13, 15 183:19, 21 184:3 205:20,
21 184:3 205:20, 22 232:8, 10 embarks 12:17
85:4 embarrassingly
94:20 embraced 43:6 emergencies 267:14
emergency 75:14 82:13 112:17
161: <i>13</i> 215:2 <i>1</i> 228: <i>13</i> 242:5 emerging 255:8
EMERSON 7:8 238:5 EMILY 6:3
182: <i>10</i> Emission 6: <i>14</i> 12: <i>1</i> 30: <i>5</i> , <i>16</i>
31: <i>15</i> 32: <i>22</i> 42: <i>14</i> 44: <i>15</i> 52: <i>14</i> 55: <i>15</i>
85:10 86:20 100:5 116:9 117:17 118:4 122:13 131:12 132:4
131:12 132:4

147:15 148:18
117.13 110.10
154:2 <i>1</i> 157:4, <i>19</i>
199.7 214.6 219.1
188:7 214:6 218: <i>1</i> , 7, <i>15</i> 230:2 234:6
7. 15 230:2 234:6
220.21 242.11
238:21 242:11
243:14 244:6, 21
245:5 254:10
257:10 261:6
263:8 269: <i>13</i>
274:4 276:16
277:15 278:13
211.13 210.13
EMISSIONS 1:6
0.5 0.0 17 10.3 7
8:5 9:8, 17 10:3, 7, 16 11:3, 12, 21
16 11.3 12 21
10 11.3, 12, 21
12: <i>12</i> , <i>13</i> 16:22
17.10 22 19.2
12: <i>1</i> 2, <i>1</i> 3 16:22 17: <i>1</i> 0, 22 18:2
20:3 25:21 28:2,
10.00.16.00.01.10
19 29:16, 22 31:10
33:15 35:4 36:14
33.13 33.4 30.14
39:9 41:18, 19
42:1 43:9, 13
45:20, 22 47:6, 8,
17, 22 49:9, 11
51.16 55.14 57.4
51:16 55:14 57:4
62.22 64.3 70.1 9
02.22 04.3 70.1,7
62:22 64:3 70:1, 9 73:15, 20 74:10
77.15 79.14 70.14
77:15 78:14 79:14
81:9 82:11, 19
01.9 02.11, 19
83:9, 11, 12, 17
84:19 87:18, 20
88:9, 18 92:13, 18
96: <i>11</i> 97: <i>5</i> , <i>14</i>
108:9 109:4, 9, 22
106.9 109.4, 9, 22
110:15 116:17, 21
117.12 110.20
117:13 119:20
123.19 124.16
123: <i>19</i> 124: <i>16</i> 125: <i>15</i> , <i>19</i> 129:22
125: <i>15</i> , <i>19</i> 129:22
120.1 5 7 11 14
130:1, 5, 7, 11, 14,
19 131:2, 7, 10, 22 134:5, 20 137:19 138:5, 12, 15 139:8
104.5.00.107.10
134:5, 20 137:19
138.5 12 15 130.8
140:19 141:1, 2
140:19 141:1, 2
140: <i>19</i> 141: <i>1</i> , 2 142: <i>17</i> 143: <i>18</i>
140: <i>19</i> 141: <i>1</i> , 2 142: <i>17</i> 143: <i>18</i>
140: <i>19</i> 141: <i>1</i> , 2 142: <i>17</i> 143: <i>18</i> 144:22 145: <i>1</i> , 3
140: <i>19</i> 141: <i>1</i> , 2 142: <i>17</i> 143: <i>18</i> 144:22 145: <i>1</i> , 3
140:19 141:1, 2 142:17 143:18 144:22 145:1, 3 146:12, 17, 18, 22
140:19 141:1, 2 142:17 143:18 144:22 145:1, 3 146:12, 17, 18, 22 147:16, 21 148:12
140:19 141:1, 2 142:17 143:18 144:22 145:1, 3 146:12, 17, 18, 22 147:16, 21 148:12
140:19 141:1, 2 142:17 143:18 144:22 145:1, 3 146:12, 17, 18, 22 147:16, 21 148:12 149:21 153:4
140:19 141:1, 2 142:17 143:18 144:22 145:1, 3 146:12, 17, 18, 22 147:16, 21 148:12 149:21 153:4
140:19 141:1, 2 142:17 143:18 144:22 145:1, 3 146:12, 17, 18, 22 147:16, 21 148:12 149:21 153:4 154:2 156:5, 8, 9,
140:19 141:1, 2 142:17 143:18 144:22 145:1, 3 146:12, 17, 18, 22 147:16, 21 148:12 149:21 153:4 154:2 156:5, 8, 9, 11, 16, 18 157:13,
140:19 141:1, 2 142:17 143:18 144:22 145:1, 3 146:12, 17, 18, 22 147:16, 21 148:12 149:21 153:4 154:2 156:5, 8, 9, 11, 16, 18 157:13,
140:19 141:1, 2 142:17 143:18 144:22 145:1, 3 146:12, 17, 18, 22 147:16, 21 148:12 149:21 153:4 154:2 156:5, 8, 9, 11, 16, 18 157:13, 17 158:4, 8, 15
140:19 141:1, 2 142:17 143:18 144:22 145:1, 3 146:12, 17, 18, 22 147:16, 21 148:12 149:21 153:4 154:2 156:5, 8, 9, 11, 16, 18 157:13, 17 158:4, 8, 15
140:19 141:1, 2 142:17 143:18 144:22 145:1, 3 146:12, 17, 18, 22 147:16, 21 148:12 149:21 153:4 154:2 156:5, 8, 9, 11, 16, 18 157:13, 17 158:4, 8, 15
140:19 141:1, 2 142:17 143:18 144:22 145:1, 3 146:12, 17, 18, 22 147:16, 21 148:12 149:21 153:4 154:2 156:5, 8, 9, 11, 16, 18 157:13, 17 158:4, 8, 15 160:4, 13 161:19 162:4, 11, 13, 16, 17
140:19 141:1, 2 142:17 143:18 144:22 145:1, 3 146:12, 17, 18, 22 147:16, 21 148:12 149:21 153:4 154:2 156:5, 8, 9, 11, 16, 18 157:13, 17 158:4, 8, 15 160:4, 13 161:19 162:4, 11, 13, 16, 17 163:14 167:2
140:19 141:1, 2 142:17 143:18 144:22 145:1, 3 146:12, 17, 18, 22 147:16, 21 148:12 149:21 153:4 154:2 156:5, 8, 9, 11, 16, 18 157:13, 17 158:4, 8, 15 160:4, 13 161:19 162:4, 11, 13, 16, 17 163:14 167:2
140:19 141:1, 2 142:17 143:18 144:22 145:1, 3 146:12, 17, 18, 22 147:16, 21 148:12 149:21 153:4 154:2 156:5, 8, 9, 11, 16, 18 157:13, 17 158:4, 8, 15 160:4, 13 161:19 162:4, 11, 13, 16, 17 163:14 167:2 169:8, 17 171:3
140:19 141:1, 2 142:17 143:18 144:22 145:1, 3 146:12, 17, 18, 22 147:16, 21 148:12 149:21 153:4 154:2 156:5, 8, 9, 11, 16, 18 157:13, 17 158:4, 8, 15 160:4, 13 161:19 162:4, 11, 13, 16, 17 163:14 167:2 169:8, 17 171:3
140:19 141:1, 2 142:17 143:18 144:22 145:1, 3 146:12, 17, 18, 22 147:16, 21 148:12 149:21 153:4 154:2 156:5, 8, 9, 11, 16, 18 157:13, 17 158:4, 8, 15 160:4, 13 161:19 162:4, 11, 13, 16, 17 163:14 167:2 169:8, 17 171:3 178:19, 21 186:1,
140:19 141:1, 2 142:17 143:18 144:22 145:1, 3 146:12, 17, 18, 22 147:16, 21 148:12 149:21 153:4 154:2 156:5, 8, 9, 11, 16, 18 157:13, 17 158:4, 8, 15 160:4, 13 161:19 162:4, 11, 13, 16, 17 163:14 167:2 169:8, 17 171:3
140:19 141:1, 2 142:17 143:18 144:22 145:1, 3 146:12, 17, 18, 22 147:16, 21 148:12 149:21 153:4 154:2 156:5, 8, 9, 11, 16, 18 157:13, 17 158:4, 8, 15 160:4, 13 161:19 162:4, 11, 13, 16, 17 163:14 167:2 169:8, 17 171:3 178:19, 21 186:1, 22 188:19 193:18
140:19 141:1, 2 142:17 143:18 144:22 145:1, 3 146:12, 17, 18, 22 147:16, 21 148:12 149:21 153:4 154:2 156:5, 8, 9, 11, 16, 18 157:13, 17 158:4, 8, 15 160:4, 13 161:19 162:4, 11, 13, 16, 17 163:14 167:2 169:8, 17 171:3 178:19, 21 186:1, 22 188:19 193:18 198:11, 14, 16
140:19 141:1, 2 142:17 143:18 144:22 145:1, 3 146:12, 17, 18, 22 147:16, 21 148:12 149:21 153:4 154:2 156:5, 8, 9, 11, 16, 18 157:13, 17 158:4, 8, 15 160:4, 13 161:19 162:4, 11, 13, 16, 17 163:14 167:2 169:8, 17 171:3 178:19, 21 186:1, 22 188:19 193:18 198:11, 14, 16
140:19 141:1, 2 142:17 143:18 144:22 145:1, 3 146:12, 17, 18, 22 147:16, 21 148:12 149:21 153:4 154:2 156:5, 8, 9, 11, 16, 18 157:13, 17 158:4, 8, 15 160:4, 13 161:19 162:4, 11, 13, 16, 17 163:14 167:2 169:8, 17 171:3 178:19, 21 186:1, 22 188:19 193:18 198:11, 14, 16 199:2 204:20
140:19 141:1, 2 142:17 143:18 144:22 145:1, 3 146:12, 17, 18, 22 147:16, 21 148:12 149:21 153:4 154:2 156:5, 8, 9, 11, 16, 18 157:13, 17 158:4, 8, 15 160:4, 13 161:19 162:4, 11, 13, 16, 17 163:14 167:2 169:8, 17 171:3 178:19, 21 186:1, 22 188:19 193:18 198:11, 14, 16 199:2 204:20 209:6 212:17
140:19 141:1, 2 142:17 143:18 144:22 145:1, 3 146:12, 17, 18, 22 147:16, 21 148:12 149:21 153:4 154:2 156:5, 8, 9, 11, 16, 18 157:13, 17 158:4, 8, 15 160:4, 13 161:19 162:4, 11, 13, 16, 17 163:14 167:2 169:8, 17 171:3 178:19, 21 186:1, 22 188:19 193:18 198:11, 14, 16 199:2 204:20 209:6 212:17
140:19 141:1, 2 142:17 143:18 144:22 145:1, 3 146:12, 17, 18, 22 147:16, 21 148:12 149:21 153:4 154:2 156:5, 8, 9, 11, 16, 18 157:13, 17 158:4, 8, 15 160:4, 13 161:19 162:4, 11, 13, 16, 17 163:14 167:2 169:8, 17 171:3 178:19, 21 186:1, 22 188:19 193:18 198:11, 14, 16 199:2 204:20

224:20, 22 225:13
226:14 229:22
235:11 239:13
240:10 241:16
242:7, 12 243:11,
<i>15</i> 244:7, 21 245:2
246:7 247:10 251:18 253:19
251:18 253:19
255:5, 15, 16, 17 257:12 258:5
257:12 258:5 259:8, 17 260:17
259:8, 1/ 200:1/
261: <i>10</i> 263: <i>19</i> 265: <i>6</i> , <i>9</i> 266: <i>5</i>
270:11 271:17, 20
273:13 275:7
273:13 275:7 277:15 285:3
286:11
emit 42:8 165:15
175: <i>3</i>
emitter 62: <i>13</i>
166:22
emotional 18:1
35:12
emphasis 80:13 employed 103:7
224:1 277:8
employee 137:20
employees 103:16
113:19
113: <i>19</i>
113: <i>19</i> employing 125: <i>9</i> employment 103: <i>16</i>
113:19 employing 125:9 employment 103:16 empowers 138:12,
113:19 employing 125:9 employment 103:16 empowers 138:12,
113:19 employing 125:9 employment 103:16 empowers 138:12, 13 EMT 162:7
113:19 employing 125:9 employment 103:16 empowers 138:12, 13 EMT 162:7 enable 55:15
113:19 employing 125:9 employment 103:16 empowers 138:12, 13 EMT 162:7 enable 55:15 168:10 169:22
113:19 employing 125:9 employment 103:16 empowers 138:12, 13 EMT 162:7 enable 55:15 168:10 169:22 217:10
113:19 employing 125:9 employment 103:16 empowers 138:12, 13 EMT 162:7 enable 55:15 168:10 169:22 217:10 enact 35:6 36:9
113:19 employing 125:9 employment 103:16 empowers 138:12, 13 EMT 162:7 enable 55:15 168:10 169:22 217:10 enact 35:6 36:9 121:7 167:5 204:1
113:19 employing 125:9 employment 103:16 empowers 138:12, 13 EMT 162:7 enable 55:15 168:10 169:22 217:10 enact 35:6 36:9 121:7 167:5 204:1 209:5 221:8
113:19 employing 125:9 employment 103:16 empowers 138:12, 13 EMT 162:7 enable 55:15 168:10 169:22 217:10 enact 35:6 36:9 121:7 167:5 204:1 209:5 221:8 223:13 269:11
113:19 employing 125:9 employment 103:16 empowers 138:12, 13 EMT 162:7 enable 55:15 168:10 169:22 217:10 enact 35:6 36:9 121:7 167:5 204:1 209:5 221:8 223:13 269:11 enacted 203:20 239:16
113:19 employing 125:9 employment 103:16 empowers 138:12, 13 EMT 162:7 enable 55:15 168:10 169:22 217:10 enact 35:6 36:9 121:7 167:5 204:1 209:5 221:8 223:13 269:11 enacted 203:20 239:16 enacting 121:13
113:19 employing 125:9 employment 103:16 empowers 138:12, 13 EMT 162:7 enable 55:15 168:10 169:22 217:10 enact 35:6 36:9 121:7 167:5 204:1 209:5 221:8 223:13 269:11 enacted 203:20 239:16 enacting 121:13 166:12
113:19 employing 125:9 employment 103:16 empowers 138:12, 13 EMT 162:7 enable 55:15 168:10 169:22 217:10 enact 35:6 36:9 121:7 167:5 204:1 209:5 221:8 223:13 269:11 enacted 203:20 239:16 enacting 121:13 166:12
113:19 employing 125:9 employment 103:16 empowers 138:12, 13 EMT 162:7 enable 55:15 168:10 169:22 217:10 enact 35:6 36:9 121:7 167:5 204:1 209:5 221:8 223:13 269:11 enacted 203:20 239:16 enacting 121:13 166:12
employing 125:9 employment 103:16 empowers 138:12, 13 EMT 162:7 enable 55:15 168:10 169:22 217:10 enact 35:6 36:9 121:7 167:5 204:1 209:5 221:8 223:13 269:11 enacted 203:20 239:16 enacting 121:13 166:12 encourage 15:16 16:5 23:1 31:3 37:9 57:1 58:10
113:19 employing 125:9 employment 103:16 empowers 138:12, 13 EMT 162:7 enable 55:15 168:10 169:22 217:10 enact 35:6 36:9 121:7 167:5 204:1 209:5 221:8 223:13 269:11 enacted 203:20 239:16 enacting 121:13 166:12 encourage 15:16 16:5 23:1 31:3 37:9 57:1 58:10 70:19 76:1 102:4
employing 125:9 employment 103:16 empowers 138:12, 13 EMT 162:7 enable 55:15 168:10 169:22 217:10 enact 35:6 36:9 121:7 167:5 204:1 209:5 221:8 223:13 269:11 enacted 203:20 239:16 enacting 121:13 166:12 encourage 15:16 16:5 23:1 31:3 37:9 57:1 58:10 70:19 76:1 102:4 108:20 126:12
employing 125:9 employment 103:16 empowers 138:12, 13 EMT 162:7 enable 55:15 168:10 169:22 217:10 enact 35:6 36:9 121:7 167:5 204:1 209:5 221:8 223:13 269:11 enacted 203:20 239:16 enacting 121:13 166:12 encourage 15:16 16:5 23:1 31:3 37:9 57:1 58:10 70:19 76:1 102:4 108:20 126:12 128:9 130:19
employing 125:9 employment 103:16 empowers 138:12, 13 EMT 162:7 enable 55:15 168:10 169:22 217:10 enact 35:6 36:9 121:7 167:5 204:1 209:5 221:8 223:13 269:11 enacted 203:20 239:16 enacting 121:13 166:12 encourage 15:16 16:5 23:1 31:3 37:9 57:1 58:10 70:19 76:1 102:4 108:20 126:12 128:9 130:19 135:11 136:7
employing 125:9 employment 103:16 empowers 138:12, 13 EMT 162:7 enable 55:15 168:10 169:22 217:10 enact 35:6 36:9 121:7 167:5 204:1 209:5 221:8 223:13 269:11 enacted 203:20 239:16 enacting 121:13 166:12 encourage 15:16 16:5 23:1 31:3 37:9 57:1 58:10 70:19 76:1 102:4 108:20 126:12 128:9 130:19 135:11 136:7 147:14 164:4
employing 125:9 employment 103:16 empowers 138:12, 13 EMT 162:7 enable 55:15 168:10 169:22 217:10 enact 35:6 36:9 121:7 167:5 204:1 209:5 221:8 223:13 269:11 enacted 203:20 239:16 enacting 121:13 166:12 encourage 15:16 16:5 23:1 31:3 37:9 57:1 58:10 70:19 76:1 102:4 108:20 126:12 128:9 130:19 135:11 136:7
employing 125:9 employment 103:16 empowers 138:12, 13 EMT 162:7 enable 55:15 168:10 169:22 217:10 enact 35:6 36:9 121:7 167:5 204:1 209:5 221:8 223:13 269:11 enacted 203:20 239:16 enacting 121:13 166:12 encourage 15:16 16:5 23:1 31:3 37:9 57:1 58:10 70:19 76:1 102:4 108:20 126:12 128:9 130:19 135:11 136:7 147:14 164:4 176:20 183:15 205:11 217:15 220:2, 16 231:21
employing 125:9 employment 103:16 empowers 138:12, 13 EMT 162:7 enable 55:15 168:10 169:22 217:10 enact 35:6 36:9 121:7 167:5 204:1 209:5 221:8 223:13 269:11 enacted 203:20 239:16 enacting 121:13 166:12 encourage 15:16 16:5 23:1 31:3 37:9 57:1 58:10 70:19 76:1 102:4 108:20 126:12 128:9 130:19 135:11 136:7 147:14 164:4 176:20 183:15 205:11 217:15 220:2, 16 231:21
employing 125:9 employment 103:16 empowers 138:12, 13 EMT 162:7 enable 55:15 168:10 169:22 217:10 enact 35:6 36:9 121:7 167:5 204:1 209:5 221:8 223:13 269:11 enacted 203:20 239:16 enacting 121:13 166:12 encourage 15:16 16:5 23:1 31:3 37:9 57:1 58:10 70:19 76:1 102:4 108:20 126:12 128:9 130:19 135:11 136:7 147:14 164:4 176:20 183:15 205:11 217:15 220:2, 16 231:21
employing 125:9 employment 103:16 empowers 138:12, 13 EMT 162:7 enable 55:15 168:10 169:22 217:10 enact 35:6 36:9 121:7 167:5 204:1 209:5 221:8 223:13 269:11 enacted 203:20 239:16 enacting 121:13 166:12 encourage 15:16 16:5 23:1 31:3 37:9 57:1 58:10 70:19 76:1 102:4 108:20 126:12 128:9 130:19 135:11 136:7 147:14 164:4 176:20 183:15 205:11 217:15

encouragement
168: <i>18</i> 251: <i>14</i>
encourages 126:6
encouraging 25:21
72:12
endanger 64:3
endangered 202:13
endangering 105:20
ended 60:8
endless 104:11
endorse 77:19
Endurance 78:16
endure 188:19
endured 46:9
energy 20:2 29:2
energy 20:2 29:2 35:21 38:16, 18
54:4, 5 66:1, 5
54:4, 5 66:1, 5 95:17 144:17
152: <i>10</i> 176: <i>1</i>
244:15, 16 276:6
277:18 279:15
enforce 14:1
enforceable 245:22
enforcement
239:19 240:12
engage 51:22
88:10
engagement 12:18
168:18
engagements 168:22
engine 42:8 60:1,
7 126:9 178: <i>17</i>
251:9
engineer 38:15
72: <i>14</i> 136:22
engineered 29:7
Engineering 138:1
223:21
engineers 85:9
137:7 138: <i>18</i>
engines 38:21
53:2 57: <i>17</i> 61:2 <i>1</i> 95: <i>3</i> 131: <i>4</i> 154: <i>4</i>
95:3 131:4 154:4
194: <i>19</i> 250:22
251:5
England 27:10 235:5
enhanced 202:16
204:20
enhancing 89:12
enjoy 114:18
137:9
enjoying 96:20
286:20
enormous 46:17
enrolled 227:18
ensure 9:13, 16, 22
29:13 32:22 52:1
71:9 73:14 90:8

98: <i>13</i> 117:22
124: <i>1</i> , 7 127: <i>4</i>
130:18 132:8
139:1, 7 142:14
160:22 174:10
193: <i>14</i> 195: <i>10</i>
199: <i>15</i> 217: <i>16</i>
218: <i>19</i> 222: <i>5</i>
226: <i>15</i> 231: <i>6</i>
241:14 263:21
277:16 286:9 ensures 130:21
157:21
ensuring 13:7
19:7 56:8 63:19
122:18 124:16
146: <i>1</i>
enter 142:10
enterprise 203:2
entertainment
110:19
entire 18:17 143:7 180:8 181:13 203:2 265:11
180:8 181:13
203.2 203.11 entirely 49:13
entirely 49:13 226:17
entities 278:19
entrants 264:19
entrench 269:2
entrepreneur 238:9
Environment 5:19
9: <i>16</i> 10: <i>1</i> 21: <i>14</i>
107:5 121: <i>I</i> 141:6 147:3 159: <i>I</i> 9
14/:3 159:19
169:7, 8 207:8 208:21 243:21 261:11 278:2
208.21 243.21
279:4 285:14
ENVIRONMENTA
L 1:2 2:1 6:15
7:4 8:3, 12 9:13
10:3 12:9 16:20
17:17 27:21 41:6
68:8 87:9 96:6
100:8 106:20
109: <i>12</i> 112:8, <i>18</i> 115: <i>17</i> 117: <i>18</i> 131: <i>18</i> 134: <i>3</i>
115:1/ 11/:18
139:10 142:2
144:10 147:19
154:13 159:10
162:4, 10, 21 166:1
168:1 179:22
180:2 181: <i>11</i>
196: <i>21</i> 201: <i>18</i>
208:2, 16 216:8
217:3 228:6 238:8
240:3 242:2
240:3 242:2 245:11 254:5 257:1 259:3 262:6
257:1 259:3 262:6 266:11 284:20
200.11 204.2U
V-
//www

environmentally
84:22
environmentally-
friendly 144: <i>14</i> Environments
255:7
envision 83:2
121:8 193: <i>11</i>
EPA 8:8, 10 9:11 10:4, 14 11:20
12:17 13:6 14:17
17:15 20:5 23:2
25:19 26:4, 6
17:15 20:5 23:2 25:19 26:4, 6 29:21 30:3, 8, 11 32:21 34:5 35:6
45: <i>13</i> 46:20 49:6,
<i>19</i> 50:20 51:1, 5, 8,
22 52:13, 21 53:12
54:1, 8 55:12
59:18 61:10 63:9, 22 64:13 69:13, 17,
20 70:21 71:12
73:9 77:7, 14
84:10 90:1 91:2
92:21 94:13 98:12 100:7 107:6
92:21 94:13 98:12 100:7 107:6 112:12 117:9, 21 119:18 121:10
119:18 121:10
122: <i>16</i> 126: <i>16</i>
130: <i>19</i> 131: <i>16</i> , <i>20</i> 132: <i>1</i> , <i>17</i> , <i>22</i> 134: <i>8</i> ,
11 140:18 141:9
142: <i>14</i> 144: <i>5</i> , <i>9</i>
145:15 147:16
148: <i>3</i> 151:20 152: <i>19</i> , 2 <i>1</i> , 22
154:5, <i>17</i> 156: <i>10</i> ,
<i>17</i> , <i>20</i> , <i>21</i> 157:6, 8,
10, 18 158:12 162:20 163:7, 13
162:20 163:7, 13 165:3 167:8 168:7
169:10 171:17, 18
172:2, 9 177:16
178:22 190:8, <i>13</i>
192: <i>12</i> 194: <i>12</i> , <i>13</i> 195: <i>14</i> , 20 196: <i>15</i>
199:14, 19 201:3
204:17 207:2
209: <i>12</i> 211:9 212: <i>16</i> 214: <i>4</i>
212:10 214:4 216:8 217:15, 18,
20, 22 218:6
219:10 231:5
236: <i>15</i> 239: <i>5</i> 240: <i>9</i> 241: <i>11</i>
240:9 241:11 246:2, 11 248:10
254:6 255:4 257:6,
8 258:13 262:7
267:8 269:10
270:9 271:11, 15, 18 273:22 276:12
= =: :: = = = = = = = = = = = = = = = =

278:17 279:10
287:2 288:5 291:9
EPA-HQ-OAR
16:7 136:9
EPA-HQ-OAR-
2021-0208 1:7
13:16
EPA's 8:14, 18
9:3, 0 10:9, 14, 21
EPA's 8:14, 18 9:3, 6 10:9, 14, 21 21:18 26:1 28:8 33:14 48:21 49:15 55:4 56:22 57:7, 21 69:8, 10 70:4
55:4 56:22 57:7
21 69:8, 10 70:4
74:17, 20 110:14
116:9 124: <i>15</i>
126: <i>4</i> 130: <i>1</i>
134:19 140:10
145: <i>4</i> 156: <i>12</i>
158: <i>1</i> 159: <i>13</i>
165:6, 22 192:7
201:19 217:3
258.10 264.17
273:10. 12 286:3
201:19 217:5 238:13 247:7, 8 258:10 264:17 273:10, 12 286:3 epochal 170:21
ePOWER 270:16
equally 253:14
equilibrium 171:9
Equipment 4:12
125:6 230:22
283: <i>13</i> equitable 56: <i>9</i>
87: <i>11</i> 89: <i>21</i> 116: <i>6</i>
144·19
equity 143:19
equity 143:19 260:21 278:4
equivalent 120:13
era 75:1
ERANDI 5:15
172: <i>19</i> 184: <i>14</i> , <i>19</i>
Erin 15:2
erode 199:6 erratic 81: <i>19</i>
error 174:14
192: <i>10</i>
escape 45:18 191:17 269:3 escaped 256:2
191: <i>17</i> 269: <i>3</i>
escaped 256:2
especially 21:18
30:21 42:17 49:1
57: <i>15</i> 67: <i>14</i> 73: <i>16</i> 82: <i>8</i> 108: <i>8</i> 113:22
153:9 154: <i>10</i>
158:9 185:2
213:12 215:16
213: <i>1</i> 2 215: <i>1</i> 6 230:2 <i>1</i> 256: <i>1</i> 5
265:17 268:18
269:9 271:8
essence 130: <i>3</i>

essential 21:19 36:3 41:22 117:17 127:19 essentially 171:11 207:16 establish 12:12 115:8 126:16 establishes 63:4 Establishing 67:20 estate 22:19 esteemed 52:22 estimate 24:19 estimated 24:18 25:2 32:13 etcetera 109:16 234:22 239:5 **ethanol** 64:10 129:21 130:8, 10, *14*, *18* 131:*1*, *4* 132:2, 5 250:10, 11 251:15 **ethic** 138:*13* **ETOC** 144:16 EU 239:12 Euro 239:16 **Europe** 235:5 European 71:3 EV 23:9, 12, 17 24:6 41:8 43:7, 14, 18 49:4, 10 56:11, 16 71:1, 3 74:19 90:9 127:9 141:11 261:4 262:8 263:14 264:5 265:14 266:8 evaluation 156:22 **evening** 291:17 evenings 40:2 **events** 21:15 224:17 229:3 255:10 eventually 100:14 ever-changing 95:7 ever-increasing 269:4 ever-stronger 28:13 everybody 78:18 234:8 everybody's 247:4 everyone's 14:14 evidence 11:1 13:20 18:12 **Evolving** 5:*3* 13:7 79:6 127:14 172:13 270:8 EVs 17:8 43:2 56:8 61:14, 19 62:8 74:18 89:18 138:5 179:5 264:19 265:17 exacerbate 223:10

exacerbated 112:1 162:10 283:6 exacerbates 113:11 267:20 exacerbations 268:3 274:20, 21 exactly 28:20 exam 274:9 **example** 28:13 29:9 120:20 194:9 230:18 235:15 268:4 examples 122:20 **exceed** 11:6 120:2 261:20 exceeded 258:12 exceeding 28:8 excess 91:16 208:3 excessive 42:7 **exchange** 241:18 Excuse 52:11 100:*1* 228:8 Executive 9:10, 14, 19 10:4 12:7 30:7 44:4 51:19 61:6 80:22 155:18 218:11 238:17 239:7 250:3 257:12 exemplifies 34:7 exercising 215:15 exertion 258:16, 21 **exhaust** 42:14 exhaustion 211:5 **existed** 270:12 existence 33:6 206:22 existential 258:7 existing 250:22 270:10 **expand** 14:4 49:18 55:8 114:13 **expanding** 126:10 142:9 265:10 266:5 expansion 126:12 180:5 279:6 expect 13:17 148:20 178:*1* expectation 169:9 expected 16:3 63:1 69:18 70:2 136:5 248:8 expedite 266:11 271:20 **expense** 49:10 expensive 23:10, 22 106:3 186:10, 14 207:10 experience 28:12 32:15 42:15 82:7

96:2 107:19 116:5, 8 141:21 143:22 150:19 154:11 162:7 163:4 216:4 222:11 280:6, 9 283:2 285:1 experienced 91:12 92:1 143:8 191:20 224:13 259:21 experiences 23:6 196:20 198:7 245:12 experiencing 82:14 166:18 191:15 199:2 209:21 210:3 224:10 258:9 285:12 expertise 52:13 138:7 159:10 experts 191:20 exploitation 171:8 exposed 42:18 111:21 210:7 212:22 259:11 275:4 exposing 42:14 exposure 185:5 256:14 259:14 275:13 express 114:16 284:9 285:6 291:8 expressing 224:3
experts 191:20
exposed 42: <i>18</i> 111: <i>21</i> 210: <i>7</i> 212: <i>22</i> 259: <i>11</i>
exposing 42: <i>14</i> exposure 185: <i>5</i> 256: <i>14</i> 259: <i>14</i>
express 114: <i>16</i> 284: <i>9</i> 285: <i>6</i> 291: <i>8</i>
expressing 224:3 extended 266:7
extending 12:15 178:16 265:12 extension 49:4
50:6, 9 265:19 extensions 50:5 244:4 265:7
extensive 114:7 extent 18:11
251:14 exterior 213:5 External 173:16
externality 170:22 extra 17:8 97:12,
20 191:19 extraordinary 240:2
Extreme 96:22 151:2, 7, 10 158:11 225:13 255:9
256:2, 17 260:8 extremely 141:17
159: <i>18</i> 189: <i>10</i> 192: <i>15</i> 203: <i>16</i> eye 100: <i>13</i>
eyes 46:14 53:7 190:2

< F >
F-150 85·3 21
F-150 85: <i>3</i> , <i>21</i> 86: <i>2</i> , <i>5</i> 147: <i>7</i> 270: <i>21</i>
270:21
face 87:15 91:8
165:18 185:13
194:11 228:5
256:4 262:1, 12
269:5 285:3 [°]
faces 176:19
facilitate 101:16
276:13
facilitating 14:12
facilities 88:4
89: <i>10</i>
facing 18:21 108:17 229:2
108:17 229:2
fact 11:5 72:19
103:20, 21 119:18
170: <i>16</i> 231: <i>1</i>
239:2 253:3
factors 162:10
factory 208:13
facts 34:7
Fahrenheit 210: <i>18</i>
260: <i>4</i> failed 44:22 47:6
failed 44:22 47:0
failing 113: <i>14</i> failure 269: <i>1</i>
fair 63:5 65:9
fairly 79:16
faith 48:3 81:4
118: <i>19</i> 119: <i>4</i>
121:5 168:19
faiths 118:21
fall 51:15 89:16
203:13 204:2
fallen 105:16
falling 202:21
falling 202:21 203:22
falls 82:15 239:1
families 33:1
98: <i>14</i> 99: <i>13</i>
111:20 153: <i>15</i>
167: <i>11</i> 197:22
215:1 216:2, 10
231:6
family 25:12 30:1
31:6 64:5 91:10
95·5 146·2 153· <i>1</i> 3
163: <i>10</i> 191:8 193:20 197:9
193:20 197:9
201:4 215:14, 18
229:12 255:18
267:3
family's 170:14
215:22 Fantastic 236:2
277:6
211.0

e 20.6 40.6 15
far 39:6 40:6, 15
53:17, 20 109:10
120:2 145:5, 6 165:7 239:15
165:7 239: <i>15</i>
245:7 282:20
form 100.4
188:18 180:22
188:18 189:22 204:15 268:5 farmer 129:19 farmers 129:21
204:13 208:3
farmer 129:19
farmers 129:21
130:6, 18
farming 234: <i>3</i>
farmland 225:19
far-reaching 163:8
167:9
farther 20:20
fast 25:8 47:16
237:2
faster 60:5 68:13
109:7 160: <i>13</i>
faster 60:5 68:13 109:7 160:13 fastest-growing
85: <i>11</i>
father 238:8
1auler 258:0
277:13
fatigue 211:5
favor 43:2 169:16
274: <i>3</i>
favorable 179:6
FCA 137:20
fossibility 240:14
feasibility 240:14 feasible 157:1 189:14 217:19 feasibly 235:13 feature 85:2 features 67:1
100 14 217 10
189:14 217:19
feasibly 235:13
feature 85:2
features 67:1
fed 40:7
federal 9:14 10:21
16:22 26:8 31:2
32:22 36:9 56:4,
<i>13</i> 75:3 94: <i>14</i>
98: <i>13</i> 103: <i>9</i> 104: <i>1</i>
112:12 118:2
122:22 145: <i>4</i>
112:12 118:2 122:22 145:4 151:21 160:19 174:5 176:22
174:5 176:22
190:8 193:17
194: <i>14</i> 198: <i>14</i>
194.14 198.14 199:10 221:9, 11
199.111 //1.9 11
231:5 243:22
231:5 243:22 278: <i>17</i>
231:5 243:22
231:5 243:22 278: <i>17</i>
231:5 243:22 278:17 Federation 3:4 65:12
231:5 243:22 278:17 Federation 3:4 65:12 Feds 103:13
231:5 243:22 278:17 Federation 3:4 65:12 Feds 103:13 feed 210:16
231:5 243:22 278:17 Federation 3:4 65:12 Feds 103:13 feed 210:16 229:11 260:10
231:5 243:22 278:17 Federation 3:4 65:12 Feds 103:13 feed 210:16 229:11 260:10 feedstock 129:20
231:5 243:22 278:17 Federation 3:4 65:12 Feds 103:13 feed 210:16 229:11 260:10 feedstock 129:20 feel 45:21 53:21
231:5 243:22 278:17 Federation 3:4 65:12 Feds 103:13 feed 210:16 229:11 260:10 feedstock 129:20 feel 45:21 53:21 63:5 75:9 105:7
231:5 243:22 278:17 Federation 3:4 65:12 Feds 103:13 feed 210:16 229:11 260:10 feedstock 129:20 feel 45:21 53:21 63:5 75:9 105:7 137:15 236:3
231:5 243:22 278:17 Federation 3:4 65:12 Feds 103:13 feed 210:16 229:11 260:10 feedstock 129:20 feel 45:21 53:21 63:5 75:9 105:7

285: <i>5</i> , <i>15</i>
feeling 73.4 283.3
feeling 73: <i>4</i> 283: <i>3</i> fellow 191:8
fellow 191:8
Fellowship 167:22 felt 20: <i>13</i> 45: <i>5</i> , <i>15</i>
felt 20.13 45.5 15
102 10 12 107.7
103:10, 12 197:7
FEMA 82:5
fenceline 186:21
Tencenne 180.21
fewer 17:9 97:13
119: <i>19</i> 197: <i>13</i>
Eigh 127.21
Flat 137:21
Fiat 137:21 Field 110:8
187:18 206:13
fifth 94:19
fight 36:3 54:4
111:17 112:8
111.1/ 112.0
145:19 151:19
180:2 188:4 195:7
100.20 216.9
199:20 216:8
229:19
fighting 110:12
inglitting 110.72
154:7 185: <i>I</i> 215: <i>I</i>
231:8 246: <i>1</i>
#II.d 02.2
illed 92:3
filter 23:19
154:7 185:1 215:1 231:8 246:1 filled 92:3 filter 23:19 filters 202:3
filthy 189:19
189:19
final 21:22 63:7
64:12 117:22
157:20 158: <i>19</i>
170:13 246:22
finalize 17:4, 15
30:8 31:11 49:19
69:20 71:12 145:16 152:21 154:18 157:6, 9, 10 188:6 212:13
145.16.152.21
145:16 152:21
154:18 157:6, 9, 10
199.6 212.12
100.0 212.13
216:9 217: <i>15</i>
216:9 217: <i>15</i> 230: <i>1</i> 254:7 257:6
296.6
286:6
finalized 69:13
221:19 225:3
247.10 261.21
245:19 261:21
finalizing 217:9
Finally 50:10 57:6
Finally 50:19 57:6 124:15 148:12
124:15 148:12
184.6 7773.7
financial 120.2 17
financial 120:3, 17 185:3, 13
185: <i>3</i> , <i>13</i>
financially 120:8
find 28:18 169:2
tind 28.18 160.2
229:15 231:1
229: <i>15</i> 231: <i>1</i> finding 68: <i>10</i>
229: <i>15</i> 231: <i>1</i> finding 68: <i>10</i>
229: <i>15</i> 231: <i>1</i> finding 68: <i>10</i> finds 174: <i>16</i> 253:7
229: <i>15</i> 231: <i>1</i> finding 68: <i>10</i> finds 174: <i>16</i> 253: <i>7</i> fine 64: <i>7</i> 204: <i>9</i>
229: <i>15</i> 231: <i>1</i> finding 68: <i>10</i> finds 174: <i>16</i> 253: <i>7</i> fine 64: <i>7</i> 204:9 finished 14: <i>8</i>
229: <i>15</i> 231: <i>1</i> finding 68: <i>10</i> finds 174: <i>16</i> 253: <i>7</i> fine 64: <i>7</i> 204:9 finished 14: <i>8</i>
229:15 231:1 finding 68:10 finds 174:16 253:7 fine 64:7 204:9 finished 14:8 finishing 273:4
229:15 231:1 finding 68:10 finds 174:16 253:7 fine 64:7 204:9 finished 14:8 finishing 273:4 fire 226:1 283:13,
229:15 231:1 finding 68:10 finds 174:16 253:7 fine 64:7 204:9 finished 14:8 finishing 273:4 fire 226:1 283:13, 14
229:15 231:1 finding 68:10 finds 174:16 253:7 fine 64:7 204:9 finished 14:8 finishing 273:4 fire 226:1 283:13, 14
229:15 231:1 finding 68:10 finds 174:16 253:7 fine 64:7 204:9 finished 14:8 finishing 273:4 fire 226:1 283:13,

fires 53:14 153:18
201:21 202:10
283:9
firm 118: <i>1</i>
firmly 218:12
first 9:9, 20 15:5
16:13 30:11 33:6 43:6, 7 49:3 55:21 67:2 76:17 80:9 81:15 86:1 95:15 97:2 111:7 112:10
43:6, 7 49:3 55:21
67:2 76:17 80:9
81: <i>15</i> 86: <i>1</i> 95: <i>15</i>
97:2 111:7 112:10
136:15 137:21
171:2 195:2, 5
198:4, 18 203:3, 19
216:10 224:15
232:16 238:13
252:17 270:15
277:1 288:14
291:7
firsthand 222:9
283:3
fish 189:2
fishermen 189:22
fishing 235:5
five 45:3 53:20
75:7 78:7 92:22
five-year-old
256: <i>12</i>
fix 178:11
fixed 169:1
fixes 103:12
flashy 20:9
flattened 228:12, 18
flaw 178:20
fleet 56:6 66:18
67:8, 12, 16, 20
68:5 78:5, 9 79:9
90:9 109:6 157:22
158:5 172: <i>12</i>
278:9 281:6, 13
fleets 144:21
177:14 178:2
179:8 261:3
FLEISCHER 2:19
14.9 11 12
44:8, 11, 12 FLEMING 4:15 6:14 129:8 132:11
FLEMING 4:15
6: <i>14</i> 129: <i>8</i> 132: <i>11</i>
190:19, 22 263:5, 7,
8
flex 131:11 250:10
flex-fuel 251: <i>14</i>
flex-fuel 251:14
flexibilities 51:15
flexibilities 51: <i>15</i> 222: <i>4</i> 226: <i>14</i>
flexibilities 51: <i>15</i> 222: <i>4</i> 226: <i>14</i> flexibility 51: <i>3</i>
flexibilities 51:15 222:4 226:14 flexibility 51:3 75:15
flexibilities 51:15 222:4 226:14 flexibility 51:3 75:15
flexibilities 51:15 222:4 226:14 flexibility 51:3 75:15
flexibilities 51:15 222:4 226:14 flexibility 51:3 75:15 float 104:16 flood 81:22 flooded 82:4
flexibilities 51:15 222:4 226:14 flexibility 51:3 75:15 float 104:16 flood 81:22 flooded 82:4
flexibilities 51:15 222:4 226:14 flexibility 51:3 75:15 float 104:16 flood 81:22 flooded 82:4
flexibilities 51:15 222:4 226:14 flexibility 51:3 75:15 float 104:16 flood 81:22

floods 53:14 73:6 260:1 285:16 **floor** 256:3 **Florida** 44:12 45:16 255:20 **focus** 11:19 53:4 64:14 105:9 130:19 217:8 228:21 **focused** 228:3 focuses 255:7 **focusing** 153:22 folks 21:7 178:13, **follow** 48:1 83:16 138:16 144:9 199:8 279:10 **Following** 43:*10* 45:13 100:7 162:20 **food** 168:17 189:16 203:6 226:2 227:19 229:10 240:17 foods 229:11 footprint 86:11 footsteps 43:10 **Force** 3:19 4:3, 4, 22 6:8, 9, 12 33:5 94:11, 17 97:19 110:9, 10 111:3 113:8 149:12 184:20 187:17, 19 193:*3* 196:*13* 201:13 214:16 228:3 **forced** 194:2 forces 171:14 Ford 4:21 85:3, 18 86:4 146:11 147:13, 18 148:17 149:2 218:16 266:2 270:21 fore 270:10 **forefront** 218:20 **forest** 283:9 **forests** 202:12 **foretold** 203:1 **forget** 198:8 241:20 form 101:6 199:5 **Formal** 13:20 192:*1* **former** 41:6 136:21 137:20 138:6 161:*13* 238:8 **formerly** 72:15 forms 34:10 Fort 34:2

forth 260:19 forthcoming 271:18 fortunate 20:17 34:17 96:16 **forum** 12:22 **forward** 12:18 21:21 31:12 86:15, 20 107:9 109:19 117:21 124:5 134:21 156:17 158:19 166:7 195:7 214:5 222:3 226:12 246:21 254:7 263:20 277:17 279:11 282:19 forward-looking 147:18 fossil 18:2, 21, 22 19:4 35:4 39:15 43:5 100:5 120:22 139:7 165:15 229:1 251:17 282:2 fostering 55:2 Fostoria 95:2 **foul** 208:14 found 21:3 43:17 139:3 142:6 197:5 253:13 foundation 89:1 118:2 122:15 **Founder** 38:13 270:8 **founding** 173:18 four 54:6 112:4 116:3 225:14 234:14 239:9 Fourth 50:11 271:7 four-wheel 24:5 four-year-old 44:20 frame 203:11 245:5 Framework 126:6, 16 FRANK 2:16 37:18, 19 262:18 272:20 frankly 250:14 251:8 FREDERICK 4:17 139:13, 14 free 80:5 149:4 236:3 238:2 273:19 freight 156:7 frequency 96:18 frequent 53:16 153:8 229:2

frequently 25:1 150:6 207:9 274:21 fresh 115:4 213:8 freshwater 137:14 **friendly** 286:15 Friends 21:4 96:17 277:20 frightening 21:15 **frightens** 103:21 front 83:14 180:1 210:6 213:3 285:7 **frontline** 180:1, 3 219:12 **froze** 176:2 fruit 185:22 188:20 frustrated 103:11 **fuel** 18:2, 22 19:4 23:19 25:19 31:12 35:4 39:3 55:17 57:8, 22 62:2, 9 73:19, 22 86:19 89:11 90:2 99:15 100:5, 6 107:15 117:8 120:5, 22 123:6, 11, 14 124:18 127:10 130:8 131:2, 7, 11 132:3 139:8 148:4 160:1, 6 162:19 165:21 168:3, 6 169:1, 7 171:6 174:3 175:11 176:2, 5, 10, 22 177:15 204:19 207:9 245:20 250:10, 18 251:17 254:8 280:6 282:4, 9, 19 fuel-powered 165:15 Fuels 3:3 18:21 39:16 43:5 61:6 62:2 63:15 69:2 115:21 130:11, 20 131:8, 11, 17 179:3 229:1 244:1 250:3, 4, 17, 20, 21 251:19 282:2 full 16:6 24:11 59:3 82:16 136:8 146:15 221:20 225:6 226:13 244:2 full-series 270:15 **full-sized** 50:11 full-time 45:7 fully 24:8 25:6

157:16 159:12 191:4 266:4 fully-electric 265:22 **Fund** 6:15 18:16 217:3 **Fundamental** 57:10 87:15 228:16 **funding** 186:6 279:5 funds 19:6, 7 **further** 15:1 17:16 29:11 44:3 45:22 52:1 70:13 114:3, 13, 14 116:20 119:7 126:8 127:11 128:1 157:10 192:7 197:9 239:11 249:11 Furthermore 207:6 future 12:17 31:14 35:3 41:10 47:20 63:14 77:9 81:20 88:11 90:10 105:6 107:9 109:18 115:9 123:3, 20 127:7 131:19 137:17 141:16 146:21 148:12 149:19 151:13 158:6, 20 159:20 163:14, 17 165:12 172:16 195:4 198:20 199:18 212:6 217:21 218:15, 17 221:10 226:7, 17 233:11, 12 236:19 237:15 238:6 239:8 240:15, 18 241:9 262:9 263:22 269:13 277:13, 18 279:15 284:7 285:21 286:18 287:4 futuristic 63:13 <G> **gained** 43:20 gains 63:15 67:10 89:17 gallon 78:22 160:1 169:4

gallons 39:5, 6

Galveston 162:2

gap 168:17

garage 24:10

62:4

GARCIA 3:18 93:21 235:20 236:5, 8 garden 229:6 gardens 168:15 GAROUPA 2:14 **GAS** 1:6 8:5 9:7, 17 10:2, 7 11:11 12:13 16:22 25:21 28:2, 19 29:16, 21 31:10, 12 33:14 39:12 40:6 42:1 43:9, 14, 15 47:5, 17, 22 52:13 55:14 57:8, 21 73:20 74:10 75:5 77:15 79:14, 21 80:1 87:18 88:9 92:18 96:11 97:13 100:5 108:9 110:15 114:2 116:20 125:22 126:17 127:21 130:1,5 134:5, 20 141:1, 2 142:17 145:8 146:16, 18 147:16, 21 148:4 149:21 154:21 156:11 160:2, 13 169:14, 17 175:10, 17 179:4 188:7 193:17 198:16 202:3 207:14 214:7 222:19 224:20 225:11 229:22 230:2, 17 242:12 243:11, 13 244:7 245:21 247:10 250:12, 13, 16 253:19 254:8 255:17 265:8 266:5 270:11 271:14, 17, 20 273:13 274:4 275:7 276:16 277:15 282:6, 12 286:11 gases 83:7 114:10 166:22 244:15, 22 251:18 gas-guzzling 207:10 gasoline 11:10 20:21 23:14 28:3 39:5, 9, 15, 21 61:22 62:2, 9, 11, 12 63:21 64:14

39:7 148:20

67:3, 8, 17 130:15

253:20 257:13

242:8

gasoline=powered

gasoline-powered
162: <i>14</i> 222:6
226:16
gas-powered
165:10
gathered 229:11 General 9:4 42:3
General 9:4 42:3 270:16
generally 208:4
259:6
generating 143:14
generation 44:19
89:22 109:18
284:7 286:18
generations 95:5 107:10 137:17
159:20 171:7
237:15 240:15
241:9
generator 271:4
generous 265:4
Genesis 123:3
genuine 29:15
geologist 223:22
George 176:3 Georgia 221:5
GERSTEN 7:10
251:22 266:15, 21
267:1, 2
getting 18:21 24:15 73:7 86:15
108:16 198:22
224:22 230:21, 22 GHG 8:15 10:15
11:3 17:9 55:4
62:13 90:6 122:15
124:16 131:7
162:4
giant 170:10
GILLET 3:9
76:17 254:14
273:2 <i>1</i> Gill-oh 249: <i>15</i>
Gil-oh 249:14
give 14:15 36:21
38:10 62:13 63:12
79:3 177:4 195:5
199: <i>17</i> 220: <i>21</i>
245:19 270:2
273:5
give-away 50:7
give-aways 29:17 Given 40:14 49:1
60:2 68:9 74:17
93:3 151:16
199:16 221:16
222:4 224:8
226:14 256:19
gives 79:4
giving 18:17 60:4
152:7 161: <i>16</i>

165: <i>4</i> 173: <i>18</i>
221:7 226:19
Glaciers 188:15
glad 137:3 221:13 glitch 88:3 99:2, 7,
11, 20
global 20:3 21:14
79:11, 12 84:6, 15
89: <i>16</i> 139:8
146:10 192:9 202:8 225:13 240:7 241:15 258:6 280:11
240:7 241:15
258:6 280:11 glory 105:22
GM 170:11 218:16
go 15:7 17:7, 11,
16 20:9 27:13
39:5 45:22 46:14
51:4 68:4 80:5, 8, 10 97:20 118:15
119.7 135.2 145.5
165:7 177:19, 22
165:7 177:19, 22 180:13 191:4 192:8 193:22 204:19 240:9
192:8 193:22 204·19 240·9
247:5 249:5 250:2
261:16 266:9
282:2, <i>19</i> 283: <i>4</i> goal 10:2 41: <i>18</i>
56:2 67:20 71:1,
11 81:11 103:22
122:12, 14 125:14
146:20 160: <i>12</i> 238:20 260:22
284:8
goals 9:22 36:11 55:1, 3 57:15
55:1, 3 57:15
95: <i>1</i> 2 104: <i>15</i> 112: <i>15</i> 117: <i>19</i>
127:3, 21 130:4
131: <i>19</i> 148: <i>11</i> , <i>16</i>
152: <i>1</i> 160:9
163: <i>15</i> 172:9 190: <i>11</i> 194: <i>16</i>
217:11 239:7, 15
278:20
God 45:6 80:14
234: <i>3</i> God-given 48: <i>1</i>
God's 53:6
goes 95:4 158:6
going 23:5 43:14,
15 55:21 75:13 78:15 91:20
105: <i>12</i> 107: <i>9</i>
108: <i>12</i> 167: <i>3</i>
173:20 179:7
181:5, <i>13</i> 182:6 183: <i>1</i> 186: <i>18</i>
183: <i>I</i> 186: <i>I</i> 8 195: <i>I</i> 8 203:8
204:18 206:12

204:18 206:12

220.0 221.4 224.1
228:9 231:4 234:1,
4, 7, 16, 19 242:22
268:13 275:22
280:8, 15, 18
281:10 282:1
286: <i>14</i>
Goldie 81: <i>11</i>
Good 8:2, 11
19:18 22:17 26:12
27:5, 20 29:18
40:18 44:11 47:2
52:8 53:5 54:2, 9,
15 60:14 61:5
68:21 72:12, 13
77:6 84:4 87:6
88:4 89:9 90:7
94:10 98:5, 16
99:7, 12 103:14
106: <i>14</i> 110: <i>7</i>
106:14 110:7 115:16 122:8 129:17 130:6 134:2 140:8
129:17 130:6
134:2 140:8
145: <i>15</i> 146: <i>9</i> 155: <i>17</i> 173: <i>13</i>
155:17 173:13
184:18 189:12
192:2 200:21
215: <i>16</i> 227: <i>14</i>
213:10 227:14
233:7, 11 243:7
254:3 276:9 277:4
284:1, 18 286:20
284: <i>1</i> , <i>18</i> 286:20 291: <i>17</i>
284:1, 18 286:20
284:1, 18 286:20 291:17 gotten 105:9 261:19
284:1, 18 286:20 291:17 gotten 105:9 261:19
284:1, 18 286:20 291:17 gotten 105:9 261:19 Government 31:2 46:9 82:18 148:13
284:1, 18 286:20 291:17 gotten 105:9 261:19 Government 31:2 46:9 82:18 148:13 152:9 173:19
284:1, 18 286:20 291:17 gotten 105:9 261:19 Government 31:2 46:9 82:18 148:13 152:9 173:19
284:1, 18 286:20 291:17 gotten 105:9 261:19 Government 31:2 46:9 82:18 148:13 152:9 173:19 174:17, 20 176:5,
284:1, 18 286:20 291:17 gotten 105:9 261:19 Government 31:2 46:9 82:18 148:13 152:9 173:19 174:17, 20 176:5, 18, 19 180:7
284:1, 18 286:20 291:17 gotten 105:9 261:19 Government 31:2 46:9 82:18 148:13 152:9 173:19 174:17, 20 176:5, 18, 19 180:7 196:17 198:11
284:1, 18 286:20 291:17 gotten 105:9 261:19 Government 31:2 46:9 82:18 148:13 152:9 173:19 174:17, 20 176:5, 18, 19 180:7 196:17 198:11 203:21 278:17
284:1, 18 286:20 291:17 gotten 105:9 261:19 Government 31:2 46:9 82:18 148:13 152:9 173:19 174:17, 20 176:5, 18, 19 180:7 196:17 198:11 203:21 278:17 governments 56:5
284:1, 18 286:20 291:17 gotten 105:9 261:19 Government 31:2 46:9 82:18 148:13 152:9 173:19 174:17, 20 176:5, 18, 19 180:7 196:17 198:11 203:21 278:17 governments 56:5 233:15
284:1, 18 286:20 291:17 gotten 105:9 261:19 Government 31:2 46:9 82:18 148:13 152:9 173:19 174:17, 20 176:5, 18, 19 180:7 196:17 198:11 203:21 278:17 governments 56:5 233:15 Governor 111:10
284:1, 18 286:20 291:17 gotten 105:9 261:19 Government 31:2 46:9 82:18 148:13 152:9 173:19 174:17, 20 176:5, 18, 19 180:7 196:17 198:11 203:21 278:17 governments 56:5 233:15 Governor 111:10 261:1
284:1, 18 286:20 291:17 gotten 105:9 261:19 Government 31:2 46:9 82:18 148:13 152:9 173:19 174:17, 20 176:5, 18, 19 180:7 196:17 198:11 203:21 278:17 governments 56:5 233:15 Governor 111:10 261:1 graded 242:1
284:1, 18 286:20 291:17 gotten 105:9 261:19 Government 31:2 46:9 82:18 148:13 152:9 173:19 174:17, 20 176:5, 18, 19 180:7 196:17 198:11 203:21 278:17 governments 56:5 233:15 Governor 111:10 261:1 graded 242:1 graduate 138:8
284:1, 18 286:20 291:17 gotten 105:9 261:19 Government 31:2 46:9 82:18 148:13 152:9 173:19 174:17, 20 176:5, 18, 19 180:7 196:17 198:11 203:21 278:17 governments 56:5 233:15 Governor 111:10 261:1 graded 242:1 graduate 138:8 Graham 250:2
284:1, 18 286:20 291:17 gotten 105:9 261:19 Government 31:2 46:9 82:18 148:13 152:9 173:19 174:17, 20 176:5, 18, 19 180:7 196:17 198:11 203:21 278:17 governments 56:5 233:15 Governor 111:10 261:1 graded 242:1 graduate 138:8 Graham 250:2 gram 49:21 92:22
284:1, 18 286:20 291:17 gotten 105:9 261:19 Government 31:2 46:9 82:18 148:13 152:9 173:19 174:17, 20 176:5, 18, 19 180:7 196:17 198:11 203:21 278:17 governments 56:5 233:15 Governor 111:10 261:1 graded 242:1 graduate 138:8 Graham 250:2 gram 49:21 92:22 93:1
284:1, 18 286:20 291:17 gotten 105:9 261:19 Government 31:2 46:9 82:18 148:13 152:9 173:19 174:17, 20 176:5, 18, 19 180:7 196:17 198:11 203:21 278:17 governments 56:5 233:15 Governor 111:10 261:1 graded 242:1 graduate 138:8 Graham 250:2 gram 49:21 92:22 93:1 grams 50:1 71:9
284:1, 18 286:20 291:17 gotten 105:9 261:19 Government 31:2 46:9 82:18 148:13 152:9 173:19 174:17, 20 176:5, 18, 19 180:7 196:17 198:11 203:21 278:17 governments 56:5 233:15 Governor 111:10 261:1 graded 242:1 graduate 138:8 Graham 250:2 gram 49:21 92:22 93:1 grams 50:1 71:9 77:18 157:11
284:1, 18 286:20 291:17 gotten 105:9 261:19 Government 31:2 46:9 82:18 148:13 152:9 173:19 174:17, 20 176:5, 18, 19 180:7 196:17 198:11 203:21 278:17 governments 56:5 233:15 Governor 111:10 261:1 graded 242:1 graduate 138:8 Graham 250:2 gram 49:21 92:22 93:1 grams 50:1 71:9 77:18 157:11 239:3, 9, 14
284:1, 18 286:20 291:17 gotten 105:9 261:19 Government 31:2 46:9 82:18 148:13 152:9 173:19 174:17, 20 176:5, 18, 19 180:7 196:17 198:11 203:21 278:17 governments 56:5 233:15 Governor 111:10 261:1 graded 242:1 graduate 138:8 Graham 250:2 gram 49:21 92:22 93:1 grams 50:1 71:9 77:18 157:11
284:1, 18 286:20 291:17 gotten 105:9 261:19 Government 31:2 46:9 82:18 148:13 152:9 173:19 174:17, 20 176:5, 18, 19 180:7 196:17 198:11 203:21 278:17 governments 56:5 233:15 Governor 111:10 261:1 graded 242:1 graduate 138:8 Graham 250:2 gram 49:21 92:22 93:1 grams 50:1 71:9 77:18 157:11 239:3, 9, 14 GRANDA 2:16
284:1, 18 286:20 291:17 gotten 105:9 261:19 Government 31:2 46:9 82:18 148:13 152:9 173:19 174:17, 20 176:5, 18, 19 180:7 196:17 198:11 203:21 278:17 governments 56:5 233:15 Governor 111:10 261:1 graded 242:1 graduate 138:8 Graham 250:2 gram 49:21 92:22 93:1 grams 50:1 71:9 77:18 157:11 239:3, 9, 14 GRANDA 2:16 37:18 262:18
284:1, 18 286:20 291:17 gotten 105:9 261:19 Government 31:2 46:9 82:18 148:13 152:9 173:19 174:17, 20 176:5, 18, 19 180:7 196:17 198:11 203:21 278:17 governments 56:5 233:15 Governor 111:10 261:1 graded 242:1 graduate 138:8 Graham 250:2 gram 49:21 92:22 93:1 grams 50:1 71:9 77:18 157:11 239:3, 9, 14 GRANDA 2:16 37:18 262:18 grandchildren
284:1, 18 286:20 291:17 gotten 105:9 261:19 Government 31:2 46:9 82:18 148:13 152:9 173:19 174:17, 20 176:5, 18, 19 180:7 196:17 198:11 203:21 278:17 governments 56:5 233:15 Governor 111:10 261:1 graded 242:1 graduate 138:8 Graham 250:2 gram 49:21 92:22 93:1 grams 50:1 71:9 77:18 157:11 239:3, 9, 14 GRANDA 2:16 37:18 262:18 grandchildren 34:14, 20 36:21
284:1, 18 286:20 291:17 gotten 105:9 261:19 Government 31:2 46:9 82:18 148:13 152:9 173:19 174:17, 20 176:5, 18, 19 180:7 196:17 198:11 203:21 278:17 governments 56:5 233:15 Governor 111:10 261:1 graded 242:1 graduate 138:8 Graham 250:2 gram 49:21 92:22 93:1 grams 50:1 71:9 77:18 157:11 239:3, 9, 14 GRANDA 2:16 37:18 262:18 grandchildren 34:14, 20 36:21
284:1, 18 286:20 291:17 gotten 105:9 261:19 Government 31:2 46:9 82:18 148:13 152:9 173:19 174:17, 20 176:5, 18, 19 180:7 196:17 198:11 203:21 278:17 governments 56:5 233:15 Governor 111:10 261:1 graded 242:1 graduate 138:8 Graham 250:2 gram 49:21 92:22 93:1 grams 50:1 71:9 77:18 157:11 239:3, 9, 14 GRANDA 2:16 37:18 262:18 grandchildren

granddaughter
98: <i>15</i> , <i>19</i> 99: <i>5</i>
100:12, 16
grandmother 41:8
98:8 199: <i>13</i> 229: <i>6</i>
granted 202:22
grape 268:6
grassroots 106:20
grateful 137:12
gratitude 291:9
gravity 262:5
gray 280:16
great 20:18 77:13
107:2 147:2
107:2 147:2 173:13 186:18 200:1 207:3 229:5
200:1 207:3 229:5
236:10 277:22
greater 20:7 23:3
59:19 64:2 91:4
92:22 131:2
155:21 159:15
173: <i>1</i> 9 179: <i>1</i>
194:11 207:11
226:13
greatest 32:19
75:2 109: <i>15</i> 139: <i>7</i>
241: <i>15</i>
great-
grandchildren
53:20
greatly 25:10 55:7
65: <i>13</i> 245: <i>5</i>
GRECO 3:12
84:1, 4, 5
green 105:6
122:19 274:14
276:6 280:19
greenery 285:15
GREENHOUSE
1:6 8:5 9:7.17
1:6 8:5 9:7, 17 10:2, 7 11:11
12:13 16:22 25:20
28:2, 19 29:16, 21
31:10, 12 33:14
42:1 43:9 47:5, 17,
22 55:14 57:8, 21
73:20 74:10 77:15
79:14 83:7 87:18
88:8 92:18 96:11
97:13 108:9
97: <i>13</i> 108:9 110: <i>15</i> 114: <i>10</i> 116:20 125:22
116:20 125:22
126:17 127:21 130:1, 5 134:5, 20 141:1, 2 142:17
130:1, 5 134:5, 20
141:1, 2 142:17
146:16, 18 147:16,
21 148:4 149:20
154:21 156:11
160:12 166:22
169:17 188:7

193:17 198:16

- 1	214.7 219.4
	214:7 218: <i>4</i> 224:20 229:22
	230:2 242:11
	243:11, 13 244:7,
	15 245:21 247:10
	250:12, 13, 16
	251:18 253:19
	254:8 255:17
	265:8 266:5
	270: <i>11</i> 271: <i>17</i> , <i>20</i> 273: <i>13</i> 274: <i>3</i>
	273:13 274:3
	275:6 276:15
	277:15 286:11
	Greenland 104:6
	235:7
	GreenLatinos
	179:2 <i>1</i>
	grew 44:18
	161:2 <i>1</i> 170:9, 2 <i>1</i>
	196:22 201:22
	204:6 215:15
	283:7
	grid 39:11, 22
	40:7 79:4, 6 124:3
	281:8
	GROSS 5:14
	170:4, 7
	ground 110:22
	211:2
	groundwork 155:2
	5104114110111 10012
	Group 3:13 5:22
	Group 3:13 5:22
	Group 3:13 5:22 6:16 69:2 84:8 98:9 284:4 285:7
	Group 3:13 5:22 6:16 69:2 84:8 98:9 284:4 285:7
	Group 3:13 5:22 6:16 69:2 84:8 98:9 284:4 285:7
	Group 3:13 5:22 6:16 69:2 84:8 98:9 284:4 285:7
	Group 3:13 5:22 6:16 69:2 84:8 98:9 284:4 285:7
	Group 3:13 5:22 6:16 69:2 84:8 98:9 284:4 285:7 groups 105:16 111:19 204:4 213:15 245:8 258:15 259:2 grow 151:11
	Group 3:13 5:22 6:16 69:2 84:8 98:9 284:4 285:7 groups 105:16 111:19 204:4 213:15 245:8 258:15 259:2
	Group 3:13 5:22 6:16 69:2 84:8 98:9 284:4 285:7 groups 105:16 111:19 204:4 213:15 245:8 258:15 259:2 grow 151:11
	Group 3:13 5:22 6:16 69:2 84:8 98:9 284:4 285:7 groups 105:16 111:19 204:4 213:15 245:8 258:15 259:2 grow 151:11 240:17
	Group 3:13 5:22 6:16 69:2 84:8 98:9 284:4 285:7 groups 105:16 111:19 204:4 213:15 245:8 258:15 259:2 grow 151:11 240:17 Growers 4:16
	Group 3:13 5:22 6:16 69:2 84:8 98:9 284:4 285:7 groups 105:16 111:19 204:4 213:15 245:8 258:15 259:2 grow 151:11 240:17 Growers 4:16 129:18 growing 56:10
	Group 3:13 5:22 6:16 69:2 84:8 98:9 284:4 285:7 groups 105:16 111:19 204:4 213:15 245:8 258:15 259:2 grow 151:11 240:17 Growers 4:16 129:18
	Group 3:13 5:22 6:16 69:2 84:8 98:9 284:4 285:7 groups 105:16 111:19 204:4 213:15 245:8 258:15 259:2 grow 151:11 240:17 Growers 4:16 129:18 growing 56:10 104:9 144:4, 11
	Group 3:13 5:22 6:16 69:2 84:8 98:9 284:4 285:7 groups 105:16 111:19 204:4 213:15 245:8 258:15 259:2 grow 151:11 240:17 Growers 4:16 129:18 growing 56:10 104:9 144:4, 11 185:6 210:20 219:6 growth 85:13
	Group 3:13 5:22 6:16 69:2 84:8 98:9 284:4 285:7 groups 105:16 111:19 204:4 213:15 245:8 258:15 259:2 grow 151:11 240:17 Growers 4:16 129:18 growing 56:10 104:9 144:4, 11 185:6 210:20 219:6 growth 85:13 114:6 117:8 143:8
	Group 3:13 5:22 6:16 69:2 84:8 98:9 284:4 285:7 groups 105:16 111:19 204:4 213:15 245:8 258:15 259:2 grow 151:11 240:17 Growers 4:16 129:18 growing 56:10 104:9 144:4, 11 185:6 210:20 219:6 growth 85:13 114:6 117:8 143:8, 10. 14 163:10
	Group 3:13 5:22 6:16 69:2 84:8 98:9 284:4 285:7 groups 105:16 111:19 204:4 213:15 245:8 258:15 259:2 grow 151:11 240:17 Growers 4:16 129:18 growing 56:10 104:9 144:4, 11 185:6 210:20 219:6 growth 85:13
	Group 3:13 5:22 6:16 69:2 84:8 98:9 284:4 285:7 groups 105:16 111:19 204:4 213:15 245:8 258:15 259:2 grow 151:11 240:17 Growers 4:16 129:18 growing 56:10 104:9 144:4, 11 185:6 210:20 219:6 growth 85:13 114:6 117:8 143:8, 10. 14 163:10
	Group 3:13 5:22 6:16 69:2 84:8 98:9 284:4 285:7 groups 105:16 111:19 204:4 213:15 245:8 258:15 259:2 grow 151:11 240:17 Growers 4:16 129:18 growing 56:10 104:9 144:4, 11 185:6 210:20 219:6 growth 85:13 114:6 117:8 143:8, 10, 14 163:10 166:14 279:6
	Group 3:13 5:22 6:16 69:2 84:8 98:9 284:4 285:7 groups 105:16 111:19 204:4 213:15 245:8 258:15 259:2 grow 151:11 240:17 Growers 4:16 129:18 growing 56:10 104:9 144:4, 11 185:6 210:20 219:6 growth 85:13 114:6 117:8 143:8, 10, 14 163:10 166:14 279:6 guaranteed 49:11
	Group 3:13 5:22 6:16 69:2 84:8 98:9 284:4 285:7 groups 105:16 111:19 204:4 213:15 245:8 258:15 259:2 grow 151:11 240:17 Growers 4:16 129:18 growing 56:10 104:9 144:4, 11 185:6 210:20 219:6 growth 85:13 114:6 117:8 143:8, 10, 14 163:10 166:14 279:6 guaranteed 49:11 guidance 9:21
	Group 3:13 5:22 6:16 69:2 84:8 98:9 284:4 285:7 groups 105:16 111:19 204:4 213:15 245:8 258:15 259:2 grow 151:11 240:17 Growers 4:16 129:18 growing 56:10 104:9 144:4, 11 185:6 210:20 219:6 growth 85:13 114:6 117:8 143:8, 10, 14 163:10 166:14 279:6 guaranteed 49:11 guidance 9:21 guide 207:11 GUILLOT 7:6
	Group 3:13 5:22 6:16 69:2 84:8 98:9 284:4 285:7 groups 105:16 111:19 204:4 213:15 245:8 258:15 259:2 grow 151:11 240:17 Growers 4:16 129:18 growing 56:10 104:9 144:4, 11 185:6 210:20 219:6 growth 85:13 114:6 117:8 143:8, 10, 14 163:10 166:14 279:6 guaranteed 49:11 guidance 9:21 guide 207:11
	Group 3:13 5:22 6:16 69:2 84:8 98:9 284:4 285:7 groups 105:16 111:19 204:4 213:15 245:8 258:15 259:2 grow 151:11 240:17 Growers 4:16 129:18 growing 56:10 104:9 144:4, 11 185:6 210:20 219:6 growth 85:13 114:6 117:8 143:8, 10, 14 163:10 166:14 279:6 guaranteed 49:11 guidance 9:21 guide 207:11 GUILLOT 7:6 gutted 88:6
	Group 3:13 5:22 6:16 69:2 84:8 98:9 284:4 285:7 groups 105:16 111:19 204:4 213:15 245:8 258:15 259:2 grow 151:11 240:17 Growers 4:16 129:18 growing 56:10 104:9 144:4, 11 185:6 210:20 219:6 growth 85:13 114:6 117:8 143:8, 10, 14 163:10 166:14 279:6 guaranteed 49:11 guidance 9:21 guide 207:11 GUILLOT 7:6 gutted 88:6 guzzling 145:9 <h>></h>
	Group 3:13 5:22 6:16 69:2 84:8 98:9 284:4 285:7 groups 105:16 111:19 204:4 213:15 245:8 258:15 259:2 grow 151:11 240:17 Growers 4:16 129:18 growing 56:10 104:9 144:4, 11 185:6 210:20 219:6 growth 85:13 114:6 117:8 143:8, 10, 14 163:10 166:14 279:6 guaranteed 49:11 guidance 9:21 guide 207:11 GUILLOT 7:6 gutted 88:6 guzzling 145:9

half 42:1 43:18

63:18 106:2 109:5

110.11 120.5 14
110: <i>11</i> 130: <i>5</i> , <i>14</i> 133:2, <i>3</i> 150: <i>9</i>
165: <i>13</i> 175: <i>3</i>
165: <i>13</i> 175:3 192: <i>11</i> 197:5
224:16 246:16
252:22 256:8
HALL 2:8 19:15,
18
halt 225:21
nana 12:2 22:7, 8
hand 12:2 22:7, 8 26:19 37:21 38:1 40:17 58:15, 17
40:1/ 38:13, 1/
59:5 72:1 76:6, 8, 20 80:18 93:16
94: <i>1</i> , <i>2</i> 102: <i>9</i> , <i>11</i> 121:2 <i>1</i> 122: <i>1</i>
121.21 122.1 128:14, 16 129:4,
10 132:12 135:17, 19 139:17 155:10
19 139.17 133.10
164:9, 11 172:22 173:1, 7, 9 177:3, 5
173.1, 7, 9 177.3, 3
182:1, 9 184:8, 11, 13 187:6 196:4, 6
205:16 18 216:16
205:16, 18 216:16, 17 219:19 220:3
227:3, 4 232:4, 6
233:3 247:22
248:2 249:2, 8, 16
252:3, 4 254:17, 18
262:21 266:9, 16,
18 270:1, 3 272:3
273:16, 18 276:21
287:10, 11, 15
287:10, 11, 15 288:2, 20 289:1, 14, 16 290:2, 4, 15, 17
16 290:2. 4. 15. 17
291:4
handle 80:7, 8
hands 40:13
107:12 182:13
276:22 289:5
290:8, 20
handy 258:20
HANKIN 6:20
Hankins 223:17,
20, 21
happen 21:10
67:19 275:21
happened 45:19
63:6 203:12
happening 81:17
93:3 225:15 284:9
happier 276:17
happiness 44:17
48:2
happy 26:11 58:1
hard 28:17 50:16
66:9 138:22
199: <i>11</i> 200: <i>17</i> 240: <i>14</i> , <i>15</i>
240:14, 15
harder 200:22

harm 40:18 42:9
96: <i>3</i> 141:2 <i>1</i>
143:22 150: <i>19</i>
154: <i>12</i> 163: <i>4</i>
214:9 216:4
236:20 245:12
harmful 97:3
108:2 109:9, 14
152:17 217:12
276:2
harmonization
58: <i>1</i> 124:2 <i>1</i>
harmonize 148:3
harms 17:21
213:18 215:22
HARTRICK 2:22
54:12, 15, 16
harvest 188:19, 21
228:13 268:6, 7
harvesting 168:15
harvesting 168:15 HARVEY 2:11
26:15
HAWKINS 2:21
52:5, 8
hazard 259:9
hazardous 114:10
153:16 188:19
HBCU 208:13
head 203:18
Health 2:11 9:12,
<i>16</i> 10: <i>1</i> 11: <i>13</i>
18:11 19:2, 12
28:10 30:1, 9, 18
28: <i>10</i> 30: <i>1</i> , <i>9</i> , <i>18</i> 31: <i>6</i> 33: <i>8</i> 35: <i>9</i> , <i>15</i> ,
17 36:20 42:10, 16
64:3, 8 68:8 69:11
82:7 83:3 89:15
96:7 97:21 99:13
100:11, 20 105:13
108: <i>1</i> 114: <i>11</i>
115:9 116:6
117: <i>19</i> 120: <i>4</i>
121:1 139:10
145:22 149: <i>18</i>
150:8, 10, 14 158:9,
17 159:19 161:14
17 159:19 161:14, 15 162:17 163:2,
13 102.17 103.2,
11, 16 165:17 166:2 174:21
166:2 1/4:21
195:8, 9 196: <i>17</i> , 21
197:8, 20 199:8, 20
202:17 203:15
204:14 213:18
214:22 215:22
216:1, 3, 10 219:9
234:21 243:18, 21
245:6 246:5
252: <i>13</i> 253: <i>7</i> , <i>12</i> ,
13 755.8 756.11
13 255:8 256:11, 14, 19 258:8 259:7,
14, 19 258:8 259:/,
9 261:11, 16

267:13, 21 268:3, 13, 16 269:6 275:8, 13 276:9 277:19 278:2 279:1, 13 281:5 286:8 health-based 117:4 healthcare 286:22 healthier 36:22 100:19 169:15, 18 262:9 276:17 healthiest 193:14 **Healthy** 5:18 19:1, 10 33:13 69:7 99:16 114:4 169:6, 11 194:13 200:9 214:21 255:7 267:11 274:11 **hear** 13:8 17:20 53:8 59:10 60:15 65:4 106:14 107:12 109:20 113:4 161:8 173:*11* 179:*17* 180:14 182:21 191:19, 22 195:2 199:9 206:7 209:13 211:17 214:17 220:13 227:12 230:11, 12 232:20, 21 235:22 236:6 237:20 266:21 277:4 288:8 **heard** 13:4 53:17 67:14 73:11, 15 74:6 91:3, 9 97:11 104:13 121:11 186:11 195:20 210:3 234:20 277:22 HEARING 1:4 8:4, 14, 17, 21 9:1, 5 10:19 12:20, 21 13:5, 11, 14, 17, 19 14:20 15:2, 5, 8 19:22 44:6 68:22 73:17 77:8 134:4, 10, 17, 21 135:2 171:17 246:22 247:9 258:4 273:6, 12, 22 285:22 288:11 291:10, 13, 16, 18 heart 45:4 107:8 150:8, 10, 15, 21 245:3 267:16 heartbreaking 188:12 269:9 heartened 204:22 224:5

heat 34:12 79:13 91:12, 17 96:22 188:17 199:3, 4 210:21 211:5 255:9 256:2, 6, 17 275:9 282:17 285:16 **Heather** 279:21 280:2 heating 192:6 heat-trapping 244:21 heavier 230:22 heavily 253:15 heavy 30:17 258:16, 21 271:5 **heavy-duty** 123:*16* 156:7 175:12 263:15 **Hebrew** 33:3 heed 262:14 heels 153:6 **held** 223:7 hellish 35:2 Hello 41:2 59:10 103:4 152:7 170:7 173:*11* 179:*17*, *19* 187:16 190:22 206:7, 9 211:20 214:15 223:20 227:12 230:8 232:20 252:11 273:9 284:1 289:10, 20 290:11 **help** 8:16 21:10 25:11 67:7 71:9 86:1 96:6 100:9 107:15 121:12 144:9 149:3 154:2 163:1, 15 166:1 169:4 181:5 185:17 188:14 189:6 198:1, 15 201:3 211:7 237:3 244:22 271:5 274:6 278:13 279:11 285:19 **helped** 89:8 **helpful** 27:18 103:15 **helping** 14:*12* 85:17 86:6 168:15 helps 85:20 278:18, 19 279:4 **HENDERSON** 6:15 216:21 217:2 **heritage** 227:17 hero 236:17 **Hi** 60:14 84:4 118:12 149:11 161:7 184:18

196:9 200:6 201:5, 11 209:12 214:15 217:2 230:9, 10 236:5, 8 250:1 266:21 267:1 273:21 280:2 **high** 34:11 62:20 63:14 67:7 79:9 148:17 160:1, 7 172:9 174:19 194:2, 4, 7 199:4 235:13 269:6 high-aluminum 85:2 **high-blend** 250:10 **higher** 23:16 32:15 62:15 126:21 130:10 131:1, 4, 5 132:2 160:6 171:6 172:6 178:8 212:22 245:10 higher-thanaverage 259:11 highest 63:20 242:4 259:13 highest-achieving 77:21 highlight 55:19 highlighting 270:10 **highly** 191:19 199:14 highly-inefficient 223:3 highly-polluted 215:3 high-octane 64:10 High-strength/lowweight 84:21 high-traffic 253:16 highway 150:1 180:4 212:6, 7 highway-adjacent 214:4 highways 29:5 32:19 208:5 Hill 208:8 Hills 24:3 271:5 **historic** 208:18 historical 171:19 historically 188:10 **history** 44:16 47:4 86:1 95:2 201:17 202:18 256:20 hit 45:16 104:12 121:2 151:*1* 183:*3* 199:11 233:2 hitting 203:18

hearts 256:15

hold 148:15

hottost 01.12
hottest 91:13
108:13, 14, 15
Hotu 227: <i>18</i> hour 78:20 133: <i>3</i>
246:15, 16 272:18
hours 24:12 48:5
203:5 210: <i>13</i> 215: <i>13</i>
House 4:14 24:10
32:10 137:1
140: <i>18</i> 178: <i>12</i>
212:20 213:2, <i>3</i> , <i>14</i>
215:5
housing 168:16
256:10
Houston 161:22
162:1, 7 185:4
huge 21:1 40:4
239:6 human 33:11
numan 33:11 42:10 47:20
42: <i>10</i> 47: <i>20</i> 146: <i>13</i> 165: <i>16</i>
203: <i>14</i> 206:22
203:14
Humane 203:17
human-induced
42: <i>4</i>
humanity 47:2, 6 92:15 236:20
92.13 230.20 262:14
humans 33:3
150: <i>14</i>
hundred 36:14
91: <i>15</i> 109:8
119:12 188:16
242:10
hundreds 171:21
256:5
hunger 168:17
hurricane 45:17
255:21
hurricanes 108:18
153:8 224:12
husband 43:5
198:3 256:1
277:13
husband's 28:11
hybrid 20:13, 18
21:3 28:6, 20
38:22 39:5, 20
43:7, 8 50:14
55: <i>17</i> 78: <i>7</i> 80: <i>9</i> ,
13 123:5 159:22
160:2 169:2
200.2 103.2 207.13 243.17
265·19 270·15
207:13 243:17 265:19 270:15 hybrids 41:7
77:20, 21 78:4, 6, 8,
9, 10, 17, 19, 21
79:2, 3, 8, 10 80:8
179:4 222:8 223:1
117.7 222.0 223.1

hydrogen 39:19
hydrogen 39:19
11,0108011
100 00 100 11 15
122:20 123:11, 15,
18 280:15, 16, 19
hydropower 80:3
hyperglycemia
268:10
Hyundai 4:11
78: <i>I</i> 122:9, <i>I</i> 2 123:3, 7, <i>I</i> 1, <i>I</i> 3
102.2 7 11 12
125.5, /, 11, 15
Hyundai's 123:2
Tryundar 5 123.2
< I >
I-94 82: <i>3</i>
Tom 170, 12 10
Ian 179:12, 19
ICE 43:1, 19
104:7 235:7
iceberg 104:7
TOTAL 10 1.7
ICEs 42:8
inomin 147.6
iconic 147:6 ideally 231:11
ideally 221:11
Ideany 251:11
identified 66:13
identify 187:21
288:10
idled 166:8
idling 274:16
ignore 145:14
ill 268:11, 12
III 200.11, 12
ill-conceived 88:5
m-conceived 66.5
Illinois 3:17 243:9
21111015 3.17 2.13.5
257:22 258:2, 6
250 10 17 21
259:10, 17, 21
260:2, 9, 14, 18
261:22
201.22
illness 18: <i>14</i>
96:17 105:14
96:17 105:14
108:2
illnesses 32:17
innesses 52:17
109: <i>14</i> 144:2
109.14 144.2
154: <i>14</i> 163: <i>6</i>
1 016 (056 17
216:0 256:77
216:6 256:17
imagine 115:3
imagine 115: <i>3</i> 193: <i>11</i>
imagine 115: <i>3</i> 193: <i>11</i>
imagine 115:3 193:11 immediate 31:8
imagine 115:3 193:11 immediate 31:8 35:3 39:21 80:12 82:6 130:10
imagine 115:3 193:11 immediate 31:8 35:3 39:21 80:12 82:6 130:10 151:11 228:22
imagine 115:3 193:11 immediate 31:8 35:3 39:21 80:12 82:6 130:10 151:11 228:22
imagine 115:3 193:11 immediate 31:8 35:3 39:21 80:12 82:6 130:10 151:11 228:22 immense 211:5
imagine 115:3 193:11 immediate 31:8 35:3 39:21 80:12 82:6 130:10 151:11 228:22 immense 211:5
imagine 115:3 193:11 immediate 31:8 35:3 39:21 80:12 82:6 130:10 151:11 228:22 immense 211:5 immigrant 143:21
imagine 115:3 193:11 immediate 31:8 35:3 39:21 80:12 82:6 130:10 151:11 228:22 immense 211:5 immigrant 143:21
imagine 115:3 193:11 immediate 31:8 35:3 39:21 80:12 82:6 130:10 151:11 228:22 immense 211:5 immigrant 143:21 immigrants 138:6
imagine 115:3 193:11 immediate 31:8 35:3 39:21 80:12 82:6 130:10 151:11 228:22 immense 211:5 immigrant 143:21
imagine 115:3 193:11 immediate 31:8 35:3 39:21 80:12 82:6 130:10 151:11 228:22 immense 211:5 immigrant 143:21 immigrants 138:6 216:3
imagine 115:3 193:11 immediate 31:8 35:3 39:21 80:12 82:6 130:10 151:11 228:22 immense 211:5 immigrant 143:21 immigrants 138:6 216:3 immunology 27:7
imagine 115:3 193:11 immediate 31:8 35:3 39:21 80:12 82:6 130:10 151:11 228:22 immense 211:5 immigrant 143:21 immigrants 138:6 216:3 immunology 27:7
imagine 115:3 193:11 immediate 31:8 35:3 39:21 80:12 82:6 130:10 151:11 228:22 immense 211:5 immigrant 143:21 immigrants 138:6 216:3 immunology 27:7 impact 84:18
imagine 115:3 193:11 immediate 31:8 35:3 39:21 80:12 82:6 130:10 151:11 228:22 immense 211:5 immigrant 143:21 immigrants 138:6 216:3 immunology 27:7 impact 84:18
imagine 115:3 193:11 immediate 31:8 35:3 39:21 80:12 82:6 130:10 151:11 228:22 immense 211:5 immigrant 143:21 immigrants 138:6 216:3 immunology 27:7 impact 84:18 87:19 88:2 107:18
imagine 115:3 193:11 immediate 31:8 35:3 39:21 80:12 82:6 130:10 151:11 228:22 immense 211:5 immigrant 143:21 immigrants 138:6 216:3 immunology 27:7 impact 84:18 87:19 88:2 107:18 138:5, 19 163:2, 15
imagine 115:3 193:11 immediate 31:8 35:3 39:21 80:12 82:6 130:10 151:11 228:22 immense 211:5 immigrant 143:21 immigrants 138:6 216:3 immunology 27:7 impact 84:18 87:19 88:2 107:18 138:5, 19 163:2, 15
imagine 115:3 193:11 immediate 31:8 35:3 39:21 80:12 82:6 130:10 151:11 228:22 immense 211:5 immigrant 143:21 immigrants 138:6 216:3 immunology 27:7 impact 84:18 87:19 88:2 107:18 138:5, 19 163:2, 15
imagine 115:3 193:11 immediate 31:8 35:3 39:21 80:12 82:6 130:10 151:11 228:22 immense 211:5 immigrant 143:21 immigrants 138:6 216:3 immunology 27:7 impact 84:18 87:19 88:2 107:18 138:5, 19 163:2, 15
imagine 115:3 193:11 immediate 31:8 35:3 39:21 80:12 82:6 130:10 151:11 228:22 immense 211:5 immigrant 143:21 immigrants 138:6 216:3 immunology 27:7 impact 84:18 87:19 88:2 107:18 138:5, 19 163:2, 15
imagine 115:3 193:11 immediate 31:8 35:3 39:21 80:12 82:6 130:10 151:11 228:22 immense 211:5 immigrant 143:21 immigrants 138:6 216:3 immunology 27:7 impact 84:18 87:19 88:2 107:18 138:5, 19 163:2, 15
imagine 115:3 193:11 immediate 31:8 35:3 39:21 80:12 82:6 130:10 151:11 228:22 immense 211:5 immigrant 143:21 immigrants 138:6 216:3 immunology 27:7 impact 84:18 87:19 88:2 107:18 138:5, 19 163:2, 15 165:16 177:17 178:10 215:12 264:17 285:12
imagine 115:3 193:11 immediate 31:8 35:3 39:21 80:12 82:6 130:10 151:11 228:22 immense 211:5 immigrant 143:21 immigrants 138:6 216:3 immunology 27:7 impact 84:18 87:19 88:2 107:18 138:5, 19 163:2, 15 165:16 177:17 178:10 215:12 264:17 285:12
imagine 115:3 193:11 immediate 31:8 35:3 39:21 80:12 82:6 130:10 151:11 228:22 immense 211:5 immigrant 143:21 immigrants 138:6 216:3 immunology 27:7 impact 84:18 87:19 88:2 107:18 138:5, 19 163:2, 15 165:16 177:17 178:10 215:12 264:17 285:12 impacted 82:7
imagine 115:3 193:11 immediate 31:8 35:3 39:21 80:12 82:6 130:10 151:11 228:22 immense 211:5 immigrant 143:21 immigrants 138:6 216:3 immunology 27:7 impact 84:18 87:19 88:2 107:18 138:5, 19 163:2, 15 165:16 177:17 178:10 215:12 264:17 285:12 impacted 82:7
imagine 115:3 193:11 immediate 31:8 35:3 39:21 80:12 82:6 130:10 151:11 228:22 immense 211:5 immigrant 143:21 immigrants 138:6 216:3 immunology 27:7 impact 84:18 87:19 88:2 107:18 138:5, 19 163:2, 15 165:16 177:17 178:10 215:12 264:17 285:12 impacted 82:7 107:22 180:3
imagine 115:3 193:11 immediate 31:8 35:3 39:21 80:12 82:6 130:10 151:11 228:22 immense 211:5 immigrant 143:21 immigrants 138:6 216:3 immunology 27:7 impact 84:18 87:19 88:2 107:18 138:5, 19 163:2, 15 165:16 177:17 178:10 215:12 264:17 285:12 impacted 82:7 107:22 180:3 186:20 255:19
imagine 115:3 193:11 immediate 31:8 35:3 39:21 80:12 82:6 130:10 151:11 228:22 immense 211:5 immigrant 143:21 immigrants 138:6 216:3 immunology 27:7 impact 84:18 87:19 88:2 107:18 138:5, 19 163:2, 15 165:16 177:17 178:10 215:12 264:17 285:12 impacted 82:7 107:22 180:3

impacts 9:18
18:13 34:19 35:17,
18 64:8 81:16, 20
96:7 97:4 100:10 117:5 120:5 124:9
117:3 120:3 124:9 141:18 142:4
141:78 142:4 144:8 150:22
153: <i>11</i> 158: <i>16</i>
159:20 162:1, 18
163: <i>1</i> 166:2 181: <i>4</i>
214.22 217.13
214:22 217: <i>13</i> 242: <i>13</i> 256:9, <i>15</i>
261:19
impaired 100:14
impartially 124:12
impending 240:7
impenetrable 189:5
imperative 92:16
implement 144:5
169:2 <i>1</i> 192: <i>1</i> 2
226:13 239:8
264:9
implementation
158:2 <i>1</i> 244:2
264:15
implemented 239:1,
2, 13
implementing 100:6 162:19
165:2 <i>1</i> implore 172:2
271: <i>18</i>
import 40:5
importance 38:16
57:6 228:16
252:21 284:13
important 11:21
important 11:2 <i>1</i> 17:4 57:5, 15 61:11 66:3, 6 67:5,
61:11 66:3, 6 67:5,
<i>13</i> 77:9 106:3
111:6, 17, 18 112:4,
10 124:19 144:4
151:19 158:10
165:5 176: <i>18</i>
181:2 185: <i>19</i>
186: <i>3</i> 188: <i>4</i> 208: <i>1</i> ,
7 221:11 229:18
251:12 252:19
260:8 274:1
275:19 276:13 277:14 278:1
277:14 278:1 279:5 282:9
importantly 63:2
144:21 207:22
227:21 277:18
impossible 235:8
impress 235:1
improve 61:9
73:22 92:17
73:22 92: <i>17</i> 105: <i>15</i> 109: <i>12</i> , 22
112:3 138:12

1	
101 14 100 13	
181: <i>14</i> 198: <i>12</i>	
245:6 278:15	
285:21	
improved 23:8	
25:19 42:16 86:2	
120:4 230:17	
improvement	
65:2 <i>1</i> 104: <i>14</i>	
202:7	
improvements	
130:17 147:19	
242:17	
improves 21:2	
improving 36:5	
73:19 78:14 84:19	
111:12, 18 112:17	
147:22 168:6	
223:1 245:14	
278:7, 11, 12, 21, 22	
279:12	
inadequate 51:6	
238:16	
incentive 49:7	
70:12 223:5	
incentives 25:15,	
16 60:2 120:18	
179:1, 2 180:17	
179.1, 2 160.17	
222:22 243:16	
265:21	
incentivize 57:1	
incentivize 37.1	
incentivized 131:13	
incentivizes 265:15	
incentivized 131:13 incentivizes 265:15 inches 82:2	
inches 82:2	
inches 82:2 inclement 24:4	
inches 82:2 inclement 24:4 inclined 271:12	
inches 82:2 inclement 24:4 inclined 271:12 include 29:13	
inches 82:2 inclement 24:4 inclined 271:12 include 29:13	
inches 82:2 inclement 24:4 inclined 271:12 include 29:13 56:18 95:5 123:3	
inches 82:2 inclement 24:4 inclined 271:12 include 29:13 56:18 95:5 123:3 127:8 141:11	
inches 82:2 inclement 24:4 inclined 271:12 include 29:13 56:18 95:5 123:3	
inches 82:2 inclement 24:4 inclined 271:12 include 29:13 56:18 95:5 123:3 127:8 141:11 179:3 229:5	
inches 82:2 inclement 24:4 inclined 271:12 include 29:13 56:18 95:5 123:3 127:8 141:11 179:3 229:5 286:11	
inches 82:2 inclement 24:4 inclined 271:12 include 29:13 56:18 95:5 123:3 127:8 141:11 179:3 229:5 286:11 included 174:21	
inches 82:2 inclement 24:4 inclined 271:12 include 29:13 56:18 95:5 123:3 127:8 141:11 179:3 229:5 286:11 included 174:21 266:3	
inches 82:2 inclement 24:4 inclined 271:12 include 29:13 56:18 95:5 123:3 127:8 141:11 179:3 229:5 286:11 included 174:21 266:3	
inches 82:2 inclement 24:4 inclined 271:12 include 29:13 56:18 95:5 123:3 127:8 141:11 179:3 229:5 286:11 included 174:21 266:3 includes 17:12	
inches 82:2 inclement 24:4 inclined 271:12 include 29:13 56:18 95:5 123:3 127:8 141:11 179:3 229:5 286:11 included 174:21 266:3 includes 17:12	
inches 82:2 inclement 24:4 inclined 271:12 include 29:13 56:18 95:5 123:3 127:8 141:11 179:3 229:5 286:11 included 174:21 266:3 includes 17:12 56:13 74:21 123:9 147:6 239:17	
inches 82:2 inclement 24:4 inclined 271:12 include 29:13 56:18 95:5 123:3 127:8 141:11 179:3 229:5 286:11 included 174:21 266:3 includes 17:12 56:13 74:21 123:9 147:6 239:17 including 10:2	
inches 82:2 inclement 24:4 inclined 271:12 include 29:13 56:18 95:5 123:3 127:8 141:11 179:3 229:5 286:11 included 174:21 266:3 includes 17:12 56:13 74:21 123:9 147:6 239:17 including 10:2	
inches 82:2 inclement 24:4 inclined 271:12 include 29:13 56:18 95:5 123:3 127:8 141:11 179:3 229:5 286:11 included 174:21 266:3 includes 17:12 56:13 74:21 123:9 147:6 239:17 including 10:2 12:13, 15 30:17	
inches 82:2 inclement 24:4 inclined 271:12 include 29:13 56:18 95:5 123:3 127:8 141:11 179:3 229:5 286:11 included 174:21 266:3 includes 17:12 56:13 74:21 123:9 147:6 239:17 including 10:2 12:13, 15 30:17 35:9 55:16 56:4	
inches 82:2 inclement 24:4 inclined 271:12 include 29:13 56:18 95:5 123:3 127:8 141:11 179:3 229:5 286:11 included 174:21 266:3 includes 17:12 56:13 74:21 123:9 147:6 239:17 including 10:2 12:13, 15 30:17 35:9 55:16 56:4 57:2 70:20 105:19	
inches 82:2 inclement 24:4 inclined 271:12 include 29:13 56:18 95:5 123:3 127:8 141:11 179:3 229:5 286:11 included 174:21 266:3 includes 17:12 56:13 74:21 123:9 147:6 239:17 including 10:2 12:13, 15 30:17 35:9 55:16 56:4	
inches 82:2 inclement 24:4 inclined 271:12 include 29:13 56:18 95:5 123:3 127:8 141:11 179:3 229:5 286:11 included 174:21 266:3 includes 17:12 56:13 74:21 123:9 147:6 239:17 including 10:2 12:13, 15 30:17 35:9 55:16 56:4 57:2 70:20 105:19 113:18 116:2	
inches 82:2 inclement 24:4 inclined 271:12 include 29:13 56:18 95:5 123:3 127:8 141:11 179:3 229:5 286:11 included 174:21 266:3 includes 17:12 56:13 74:21 123:9 147:6 239:17 including 10:2 12:13, 15 30:17 35:9 55:16 56:4 57:2 70:20 105:19 113:18 116:2 123:5 125:19	
inches 82:2 inclement 24:4 inclined 271:12 include 29:13 56:18 95:5 123:3 127:8 141:11 179:3 229:5 286:11 included 174:21 266:3 includes 17:12 56:13 74:21 123:9 147:6 239:17 including 10:2 12:13, 15 30:17 35:9 55:16 56:4 57:2 70:20 105:19 113:18 116:2 123:5 125:19 127:9, 12 150:14	
inches 82:2 inclement 24:4 inclined 271:12 include 29:13 56:18 95:5 123:3 127:8 141:11 179:3 229:5 286:11 included 174:21 266:3 includes 17:12 56:13 74:21 123:9 147:6 239:17 including 10:2 12:13, 15 30:17 35:9 55:16 56:4 57:2 70:20 105:19 113:18 116:2 123:5 125:19 127:9, 12 150:14 157:18 175:5, 14	
inches 82:2 inclement 24:4 inclined 271:12 include 29:13 56:18 95:5 123:3 127:8 141:11 179:3 229:5 286:11 included 174:21 266:3 includes 17:12 56:13 74:21 123:9 147:6 239:17 including 10:2 12:13, 15 30:17 35:9 55:16 56:4 57:2 70:20 105:19 113:18 116:2 123:5 125:19 127:9, 12 150:14 157:18 175:5, 14	
inches 82:2 inclement 24:4 inclined 271:12 include 29:13 56:18 95:5 123:3 127:8 141:11 179:3 229:5 286:11 included 174:21 266:3 includes 17:12 56:13 74:21 123:9 147:6 239:17 including 10:2 12:13, 15 30:17 35:9 55:16 56:4 57:2 70:20 105:19 113:18 116:2 123:5 125:19 127:9, 12 150:14 157:18 175:5, 14 176:8, 13 179:3	
inches 82:2 inclement 24:4 inclined 271:12 include 29:13 56:18 95:5 123:3 127:8 141:11 179:3 229:5 286:11 included 174:21 266:3 includes 17:12 56:13 74:21 123:9 147:6 239:17 including 10:2 12:13, 15 30:17 35:9 55:16 56:4 57:2 70:20 105:19 113:18 116:2 123:5 125:19 127:9, 12 150:14 157:18 175:5, 14 176:8, 13 179:3	
inches 82:2 inclement 24:4 inclined 271:12 include 29:13 56:18 95:5 123:3 127:8 141:11 179:3 229:5 286:11 included 174:21 266:3 includes 17:12 56:13 74:21 123:9 147:6 239:17 including 10:2 12:13, 15 30:17 35:9 55:16 56:4 57:2 70:20 105:19 113:18 116:2 123:5 125:19 127:9, 12 150:14 157:18 175:5, 14 176:8, 13 179:3 211:8 260:2 264:11 265:13	
inches 82:2 inclement 24:4 inclined 271:12 include 29:13 56:18 95:5 123:3 127:8 141:11 179:3 229:5 286:11 included 174:21 266:3 includes 17:12 56:13 74:21 123:9 147:6 239:17 including 10:2 12:13, 15 30:17 35:9 55:16 56:4 57:2 70:20 105:19 113:18 116:2 123:5 125:19 127:9, 12 150:14 157:18 175:5, 14 176:8, 13 179:3	
inches 82:2 inclement 24:4 inclined 271:12 include 29:13 56:18 95:5 123:3 127:8 141:11 179:3 229:5 286:11 included 174:21 266:3 includes 17:12 56:13 74:21 123:9 147:6 239:17 including 10:2 12:13, 15 30:17 35:9 55:16 56:4 57:2 70:20 105:19 113:18 116:2 123:5 125:19 127:9, 12 150:14 157:18 175:5, 14 176:8, 13 179:3 211:8 260:2 264:11 265:13 266:2	
inches 82:2 inclement 24:4 inclined 271:12 include 29:13 56:18 95:5 123:3 127:8 141:11 179:3 229:5 286:11 included 174:21 266:3 includes 17:12 56:13 74:21 123:9 147:6 239:17 including 10:2 12:13, 15 30:17 35:9 55:16 56:4 57:2 70:20 105:19 113:18 116:2 123:5 125:19 127:9, 12 150:14 157:18 175:5, 14 176:8, 13 179:3 211:8 260:2 264:11 265:13 266:2 inclusion 56:22	
inches 82:2 inclement 24:4 inclined 271:12 include 29:13 56:18 95:5 123:3 127:8 141:11 179:3 229:5 286:11 included 174:21 266:3 includes 17:12 56:13 74:21 123:9 147:6 239:17 including 10:2 12:13, 15 30:17 35:9 55:16 56:4 57:2 70:20 105:19 113:18 116:2 123:5 125:19 127:9, 12 150:14 157:18 175:5, 14 176:8, 13 179:3 211:8 260:2 264:11 265:13 266:2 inclusion 56:22 265:2	
inches 82:2 inclement 24:4 inclined 271:12 include 29:13 56:18 95:5 123:3 127:8 141:11 179:3 229:5 286:11 included 174:21 266:3 includes 17:12 56:13 74:21 123:9 147:6 239:17 including 10:2 12:13, 15 30:17 35:9 55:16 56:4 57:2 70:20 105:19 113:18 116:2 123:5 125:19 127:9, 12 150:14 157:18 175:5, 14 176:8, 13 179:3 211:8 260:2 264:11 265:13 266:2 inclusion 56:22 265:2 inclusive 52:16	
inches 82:2 inclement 24:4 inclined 271:12 include 29:13 56:18 95:5 123:3 127:8 141:11 179:3 229:5 286:11 included 174:21 266:3 includes 17:12 56:13 74:21 123:9 147:6 239:17 including 10:2 12:13, 15 30:17 35:9 55:16 56:4 57:2 70:20 105:19 113:18 116:2 123:5 125:19 127:9, 12 150:14 157:18 175:5, 14 176:8, 13 179:3 211:8 260:2 264:11 265:13 266:2 inclusion 56:22 265:2	

income 68:12 88:2 169:*1* **incoming** 268:20 incongruence 34:7 **Incorporated** 98:10 increase 18:4 39:7 56:20 57:17 61:15 68:8 78:4 107:*15* 130:3 175:9, 16 225:17 244:15 245:3 257:13 increased 25:14 32:16 62:21 96:14 114:11 118:3 120:3 141:12 144:1 154:13 157:5 163:5 208:5 210:17 251:17, 18 259:22 increases 86:13 96:18 175:19 **increasing** 51:5, 13 63:12, 18 74:19 126:11 151:2 175:11 176:10 275:9 285:17 increasingly 11:15 28:7 81:19 108:10 116:16 229:2 269:3 increasinglypowerful 28:4 incredible 178:15 incremental 46:16 204:5 **Independence** 66:6 79:3, 5 **Independents** 174:22 175:6, 15 176:9 Index 45:13 258:11 India 284:22 **Indian** 227:17 **Indiana** 170:12 **indicate** 91:*15* indicated 49:15 217:20 indicates 50:2 71:4 74:18 95:21 119:18 indicating 189:10 indication 251:11 Indigenous 109:12 141:20 150:18 163:3 228:16, 21 238:12 256:22 indirectly 265:15 individual 284:6 285:20 286:16 individually 107:20 individuals 210:6, 15, 22 211:1 indoor 113:19 189:8, *17* indoors 18:9 114:2 153:19 258:18 269:8 **induction** 236:14 industrial 88:5 180:12 industries 93:7 197:14 202:16 271:13 **industry** 10:11 11:1,8 23:4 25:20 26:5 29:2 40:11 50:2 51:4, 17 55:5 57:11 63:17 66:14 73:16 83:1 84:9, 17 85:4 86:18 89:15 95:7 98:17, 18 100:3 104:1 120:10 126:3 127:6 137:8 138:15, 22 139:1 145:11 148:13 166:5 172:5 175:21 202:21 203:1, 22 204:6, 9, 13 205:2 206:19 218:19 222:9 234:4 235:6 237:3 241:19 264:1 265:12 279:14 industry-backed 140:19 263:12 industry's 127:20 inefficient 29:2 inequalities 195:8 inequitable 96:7 165:19 inequity 142:5 256:20 inextricably 87:16 **infant** 45:9 **infants** 256:16 **infected** 275:17 inflammation 18:1, influenced 170:20 informally 13:19 information 10:10 63:8, 10 64:15 95:17 248:16 informed 35:19 117:13 175:8 176:14 infrastructure 23:8 25:8, 15, 17 56:6, 9 67:22 68:11 94:21 115:5 122:19

124:3 127:10 147:1 226:3 233:22 257:5 261:2 276:4 ingenuity 29:10 **inhaler** 215:10 **inherent** 86:14 142:5 inheriting 34:20 **initial** 17:12 185:17 initially 72:17 injustice 87:14 105:15 154:13 innovate 28:22 innovated 265:22 Innovation 2:22 26:3 29:10 54:17 74:4 84:20 85:14 88:20 90:2 120:21 126:8, 22 127:21 138:13, 21 166:14 207:11 263:14 266:9 **innovative** 125:13 126:12 input 12:19 250:8 **insight** 17:18 77:22 insist 196:16 inspiration 144:15 **inspire** 118:*18* install 25:16 installed 24:9 installing 42:21 instruction 99:6 **insulin** 268:9 insurance 216:2 integral 84:22 integrated 250:13 **intend** 149:2 intended 192:5 248:13 intense 105:9 199:3 258:22 intensifying 262:1 intensive 267:22 intent 177:16 240:1 **intention** 288:11 interest 21:3 157:4 interested 9:6 12:22 134:18 272:19 interests 207:18 208:22 Interfaith 3:11 4:9 52:10 80:22 83:2 118:13, 18

Intergovernmental 35:1 225:11 244:10 **internal** 10:11 38:21 42:8 57:16 60:1 61:21 126:9 154:3 250:22 251:4, 9, 12 international 11:18 inter-related 106:3 intersection 87:19 intersections 210:11 **Interstate** 212:5, 7, 12, 20 intertwined 87:16 Intestate 213:22 intimately 33:13 introduced 171:5 introducing 16:9 136:11 248:9 introduction 95:1 inversions 113:20 invest 207:13 invested 85:15 138:2*1* investing 19:9 55:10 125:18 146:22 147:10 218:17 investment 85:13 89:3, 10, 20 90:5 123:8, 9 investments 25:14 56:14, 16 57:16 88:9 127:9, 11 261:2 invitation 15:13 37:6 58:7 75:20 102:*1* 128:*6* 135:*9* 164:1 179:16 182:20 183:2, 13 184:15 205:8 206:4 211:16 231:18 235:21 237:19 247:15 255:3 270:5 invite 22:7 26:18 37:21 93:16, 22 121:21 129:4, 9 132:11 139:16 172:22 173:7 182:*1* 187:*6* 192:20 196:3 241:1 249:8, 16 254:16 262:20, 21 272:2 273:15 287:10, 14, 22 288:19 289:12, 22 290:13

involved 72:17 99:10 180:18 208:20 involves 66:12 ion 120:12 **Ioniq** 78:1 Iowa 227:16 229:8 **IPCC** 42:2 47:12 153:6 166:17 188:9 206:20 209:4 255:13 262:13 282:13 **IPL** 81:1, 15 irrelevant 13:22 irreversible 47:14 226:9 255:16 **irritants** 100:13 **Island** 256:4 **issue** 46:5 61:17 63:8 104:16 112:18 143:19 146:14 208:7 285:5 issued 9:10, 19 12:7 issues 14:9 23:6 63:1 100:11, 20 103:10 105:15 106:2 124:9 150:10, 14 176:17, *19* 240:*4* 261:*15* 268:20 281:2, 14, 15 **issuing** 100:9 144:7 162:22 iterations 250:6 its 11:16 43:8 49:4, 8 51:13 64:1 66:21 86:3 90:1 103:21 110:18 116:15 123:13 140:19, 21 142:1 144:9 162:21 167:3, 22 170:13, 17 173:18 175:20 226:8 258:11 261:12 264:3 269:10 278:5 < J > **J.B** 261:*1* **JACK** 2:17 3:17 38:6, 12 257:18, 21 **JACKIE** 3:18 93:21 235:20 236:5 **Jam** 137:10 **JAMES** 7:9

249:21 250:1

JANET 5:4

January 41:9
116: <i>15</i> 193: <i>5</i>
JEFFREY 5:14
170:4, 7
Jennie 22:4
JENNY 2:9
jeopardize 29:12
Jersey 22:20 24:4
284:2
job 103:9, 17
117:8 163: <i>10</i> 166: <i>14</i> 192: <i>5</i>
223:6 266:9
Jobs 42:20, 21
55:18 84:17 87:11
88:4 89:2, 9, 14
90:7 125:8 137:8
138:11 147:12
166:12 167:10
219:6 260:19
264:12 279:15
JOHN 4: <i>16</i> 129: <i>14</i> , <i>17</i>
join 237:12, 14
241: <i>1</i> 273:6
joined 22:6 26:17
37:20, 22 58:13
71:21 76:4, 19
93:15 102:7
121:20 128:12
129: <i>3</i> 131: <i>15</i>
132:9, <i>11</i> 135: <i>15</i>
139:15 155:9
164:7 172:21 173:6 181:22 182:2 184:6 187:5 205:14 216:15
1/3:0 181:22
182:2 184:0 187:3
219:18 220:1
217:16 220.1
247:20 248:22
252:2 254:16
262:20 269:22
JOSE 4:10 121:18
JP 5:16 173:5, 9,
15
Judge 103:8
240:19
JUDI 5:13 167:15,
20
July 82:5 108: <i>13</i> 188:2 <i>1</i> 194: <i>4</i>
June 30:22 82:1
91: <i>11</i> 108: <i>15</i>
jurisdiction 156:3
Justice 2:19 9:13
10:3 27:22 45:8
96:6 100:8 109:12
112:8, 18 131:18
142:2 144: <i>10</i> 162:22 166: <i>1</i> 168: <i>1</i> 179:22
162:22 166:1
168:1 179:22

208:2 211:2 <i>I</i> 216:8 228:6 242:2 245: <i>I1</i> 254:5 257: <i>I</i> 259:4 262:6 284:20 justified 49:7 69: <i>I4</i> justify 18:2 <i>I</i> 50:8 JUSTIN 6: <i>I7</i> 219:2 <i>I</i>
< K > Kansas 106:16, 17, 22 108:19 109:17 277:8, 10, 20 278:14 KAREN 7:7 237:18, 21 240:22 241:7 Kataoka 9:3 Kayla 8:7 15:4 132:19 134:7, 12 246:13 247:5, 6 248:12 272:15 273:9 keep 14:12 98:19
104:18 139:6 167:3 230:21 258:19 267:10 268:9, 16 269:8 274:10 288:11 keeping 18:9 keeps 268:13 283:13 KELLY 6:14 263:4, 5, 7 KENT 3:7 71:19 key 61:14 62:14 67:1 89:20 123:11
163:1 176:19 261:15 Kia 59:15 kid 96:20 197:11 kids 18:6 97:2 114:12 187:20 190:1 253:3 Kildee 81:10 kill 203:18 killed 210:14 kilograms 143:18 kind 73:1 81:10 192:11 229:3 kinds 62:22 KING 7:5 249:14 Kirk 38:12 knell 203:2 204:5 knew 18:15 45:10
99:9, 11 138:4 know 9:9 27:14 46:14 53:6 78:11 83:17 87:14, 16

largest 28:1 36:1
82:11 85:19 87:8
96·11 106·20
120:12 125:8 137:13 151:17 154:2 162:12 166:21 229:16
137:13 151:17
154:2 162:12
242:6 244:20
245:9 250:7
253: <i>18</i> 259: <i>6</i> , <i>16</i>
260:9 270:18
Las 110:8, 17, 21
113:8, 9, 18 114:5,
17
late 53:19 197:21
203:7 204:8 246:8
260:7 270:1
288: <i>10</i> latest 78: <i>16</i> 92: <i>14</i>
282:13
Latino 99:18
111:20, 22 228:3
259:10
Latinx 253:16
LAUGHLIN 5:22
182:10
launched 86:4
LAURIE 4:12
125:2, 5
law 12:10 103:8
201: <i>16</i> , <i>17</i> , <i>18</i> 203: <i>3</i> , <i>13</i> , <i>17</i> , <i>19</i>
203:3, 13, 17, 19 204:15
laws 202:22
lawsuit 180:6
lawyer 201:16
202:15
lax 140:20
lay 118: <i>1</i> 155: <i>1</i>
layer 213:4, 9 LCV 5:2 152:11
LCV 5:2 152:11
LCV's 152:12
LCV's 152:12 lead 35:11 91:4
110:9 121: <i>12</i>
110:9 121: <i>12</i> 235: <i>14</i> 238: <i>18</i>
110:9 121: <i>12</i> 235: <i>14</i> 238: <i>18</i> Leader 44: <i>13</i>
110:9 121:12 235:14 238:18 Leader 44:13 139:1 166:10
110:9 121:12 235:14 238:18 Leader 44:13 139:1 166:10 207:5
110:9 121:12 235:14 238:18 Leader 44:13 139:1 166:10 207:5 leaders 45:4 48:6 121:5 163:13
110:9 121:12 235:14 238:18 Leader 44:13 139:1 166:10 207:5 leaders 45:4 48:6 121:5 163:13
110:9 121:12 235:14 238:18 Leader 44:13 139:1 166:10 207:5 leaders 45:4 48:6 121:5 163:13 165:11 168:20 278:17 285:8
110:9 121:12 235:14 238:18 Leader 44:13 139:1 166:10 207:5 leaders 45:4 48:6 121:5 163:13 165:11 168:20 278:17 285:8
110:9 121:12 235:14 238:18 Leader 44:13 139:1 166:10 207:5 leaders 45:4 48:6 121:5 163:13 165:11 168:20 278:17 285:8 leadership 46:12, 18 88:19 125:16
110:9 121:12 235:14 238:18 Leader 44:13 139:1 166:10 207:5 leaders 45:4 48:6 121:5 163:13 165:11 168:20 278:17 285:8 leadership 46:12, 18 88:19 125:16
110:9 121:12 235:14 238:18 Leader 44:13 139:1 166:10 207:5 leaders 45:4 48:6 121:5 163:13 165:11 168:20 278:17 285:8 leadership 46:12, 18 88:19 125:16 127:16 146:21 198:14 199:19
110:9 121:12 235:14 238:18 Leader 44:13 139:1 166:10 207:5 leaders 45:4 48:6 121:5 163:13 165:11 168:20 278:17 285:8 leadership 46:12, 18 88:19 125:16 127:16 146:21 198:14 199:19 218:18 240:2
110:9 121:12 235:14 238:18 Leader 44:13 139:1 166:10 207:5 leaders 45:4 48:6 121:5 163:13 165:11 168:20 278:17 285:8 leadership 46:12, 18 88:19 125:16 127:16 146:21 198:14 199:19 218:18 240:2 291:9 leading 48:7 71:3
110:9 121:12 235:14 238:18 Leader 44:13 139:1 166:10 207:5 leaders 45:4 48:6 121:5 163:13 165:11 168:20 278:17 285:8 leadership 46:12, 18 88:19 125:16 127:16 146:21 198:14 199:19 218:18 240:2
110:9 121:12 235:14 238:18 Leader 44:13 139:1 166:10 207:5 leaders 45:4 48:6 121:5 163:13 165:11 168:20 278:17 285:8 leadership 46:12, 18 88:19 125:16 127:16 146:21 198:14 199:19 218:18 240:2 291:9 leading 48:7 71:3

163:5 188:2
198: <i>13</i> 208: <i>5</i>
253:2
leads 32:16 154:13
League 6:2 152: <i>11</i> 206: <i>10</i>
243:8, 20, 22 244:4, 7, 12, 14, 17 245:17
7, 12, 14, 17 245:17
246:2 LEAH 3:11 80:16,
21
leakage 148: <i>1</i>
leaks 282:13, 15
leap 185:13 learn 202:18 210:1
learned 19:22
99:8 223:9
learning 18: <i>13</i>
35: <i>13</i> 99: <i>6</i> , <i>10</i> lease 23: <i>17</i>
leave 75:10
153:19 197:6
213:7
leaving 46:11 73:1 103:22
159:20 241:8
led 46:7
Leesburg 41:4
42: <i>12</i> left 24: <i>18</i> , <i>21</i>
142:15 151:4
192: <i>16</i> 214: <i>1</i>
218:21 233:2
250: <i>14</i> 283: <i>16</i> left-hand 60: <i>21</i>
102:22
legacy 149: <i>3</i>
230:20
legendary 148:19 legislation 244:15
Legislative 155:18
164:22
Legislature 111:4 legislatures 145: <i>14</i>
Lemans 78:16
length 16:7
103:11 136:9
Leo 80:16
lessen 140:2 <i>1</i> lesson 202: <i>19</i>
letter 121:5
letting 161:7
189: <i>19</i>
level 18: <i>19</i> 24:9 31:9 111: <i>15</i>
157:21 218: <i>14</i>
231:10 258:14
278: <i>19</i> , <i>20</i> 279: <i>7</i> leveled 255: <i>21</i>
levels 32:15 62:22
68:12 70:16 88:2

97:3 118:3 119:8
126:2 <i>1</i> 127:4
154:22 188:22
189:11 212:22
259:11 260:7
leverage 90:1
126:22
LGBTQ 238:9
liberation 180:2
liberty 44:17 48:2
inderty 44.17 46.2
libraries 114:15 Library 197:16
Library 197: <i>16</i>
lid 189:5
lie 261:15
life 18:13 33:5, 13
41:13 44:17 47:2
48:1 52:19 62:6
72:18 86:11
107: <i>19</i> , 22 178: <i>16</i>
196:20 198:4
199:20 202:14
210.5 220.16
219:5 229:16
236: <i>12</i> 251: <i>4</i> 275: <i>14</i> 286: <i>21</i>
lifers 103:18
lifetime 50:4 70:6
75:6 119:20 143:8
225:16 265:10, 13
Light 2:4 3:11
4:9 12: <i>13</i> 17: <i>1</i>
28:18 30:4 31:13
49:8 52:10 80:22
83:2 97:16 110:16
83:2 97:16 110:16 116:18, 21 118:14
110:10, 21 110:14
119: <i>12</i> 123: <i>16</i> 149:2 <i>1</i> 188:8
149:2 <i>1</i> 188:8
149:21 188:8 193:18 198:16 204:21 206:20
204:21 206:20
218:10 224:7
230:3 234:7, 11
238:21 254:9
LIGHT-DUTY 1:6
8:5, 14, 18 9:7
10:6, 17 12:5
28:12 36:5 43:12
54:19 55:9 69:10
92.7 10 107.15
83:7, 10 107:15 116:10 124:17
116: <i>10</i> 124: <i>17</i>
134:5, 19 156:9, 10,
<i>16</i> 157: <i>18</i> , 22
158:4, 14 229:21
242:21 243:11
247:10 255:4
263:17 266:12
273:13 274:3
276: <i>15</i>
Lightening 86:5 Lightning 270:21
lights 110.18
lights 110:18 Light's 118:18
Light 8 118:18
likes 189: <i>1</i> 191: <i>3</i>

likewise 84:13 239:16 limit 14:7 16:4 96:5 136:6 160:3 198:13 231:3 **limited** 50:6 169:1 **limiting** 114:*3* **limits** 14:1 140:20 152:20 241:12, 13 LINDA 4:4 112:22 113:7 **LINDER** 4:16 129:14, 17, 18 line 80:3 108:22 146:15, 17 180:1 197:12 207:18 lines 210:6 **lineup** 14:12 lingering 82:8 LISA 5:5 155:14, 17 **list** 14:17 22:5, 13 26:15, 16 37:18, 20 58:14 59:3 71:19, 20, 22 76:5, 17 93:14, 20 102:8 104:11 121:18, 19 128:13 129:3, 7, 9 135:*16* 139:*15* 164:8 173:5 177:8 181:21 182:6, 15 184:7 187:3, 5 195:22 196:*1* 205:15 216:14 219:17, 22 232:3 234:19 247:21 248:21 249:6, 12, 20 254:15 262:19 263:4 287:21 **listed** 26:16 37:19 58:14 59:3 71:20, 22 76:5, 18 80:17 93:14, 22 102:8 121:19 128:13 129:2, 8 135:16 139:*14* 155:8 164:8 172:20 173:5 181:20 182:7 184:7 187:*4* 196:3 205:15 216:14 219:17, 22 227:1 232:3 247:21 248:21 249:7, 9, 13, 15 252:1 254:15 262:19 288:18 289:11, 21 290:12 listen 170:2 237:3 **listened** 52:15

listening 184:21 196:10 199:22 262:16 287:5 literally 46:21 literature 19:11 **lithium** 120:12, 15 littering 256:5 little 39:13 81:12, 14 133:2 197:10 203:4 204:13 213:22 215:12 237:10 246:14 249:11 270:1 280:5 282:8 283:1 livable 41:16, 17 live 19:21 21:12 24:3 30:21 32:10, *14* 34:2, *6* 38:*12* 42:6 72:14 81:22 83:4 91:10 111:2 113:8 137:13 138:20 149:14 150:1 165:14 193:5, 10, 12, 13, 14, 20 194:13 196:13 200:20 208:8 221:8 233:7 252:15 267:10, 16 275:20 283:2 288:11 lived 196:22 197:1 274:21 livelihoods 163:16 lives 19:10 21:12 151:*14* 210:*21* 267:11 276:7 livestock 234:4 living 72:17 79:15 194:10 198:7 201:14 216:5 268:1 livse 190:6 LLEWELLYN 7:3 249:7 **load** 40:3 **Lobby** 5:4 **lobbyist** 106:17 lobbyists 73:16 106:22 local 25:16 56:5, 13 79:11 116:2 117:15 155:20 258:7 276:6 278:19 **located** 60:21 275:3 locations 274:18 275:21 Locks 81:11

logistics 15:8 135:*3* long 28:17 53:18 80:10 126:16 170:15 175:10, 18 185:10 191:4 248:17 251:4 271:14 longer 12:4 81:19 260:6 265:5 longer-term 12:17 56:19 131:9 158:2, 6 217:11, 21 218:5 longingly 21:8 long-range 104:2 long-term 55:21 66:13 103:16 104:22 123:13 181:4 207:20 208:22 257:8 look 12:18 29:18 86:15, 20 131:12 134:21 141:19 158:19 233:11 237:15 246:21 263:20 280:17 **looking** 28:15 85:4 126:15 163:9 189:6 242:16 278:15 looks 117:21 177:21 179:6 196:5 236:1 247:4 272:20 loophole 111:6 loopholes 17:13 20:8 23:4 26:5 29:1.14 36:11 40:10 44:1 49:2 50:19 59:20 67:13, 15 73:11 74:13, 18, 21 82:16 91:5 97:8 109:11 112:13 119:9 141:10, 11 142:14 145:7 151:22 159:17 160:8, 22 165:9 168:9 172:10 190:9 191:21 194:15 221:21 225:6 242:15 245:19 257:7 265:3 269:12 271:19 loosely 62:18 Los 155:21 196:22 **lose** 166:12 226:1, losing 106:4 228:18 loss 82:6

lost 92:18 99:21 140:11 226:6 245:15 **lot** 14:14 67:14 73:11 108:6, 21, 22 109:*1* 111:*13* 180:*12* 191:*11* 200:12 201:1, 19 202:18 204:10 233:16 234:1 280:14 282:10 lots 274:16 lotus 229:9 **loud** 53:13 222:19 **Loudon** 2:18 41:3 love 86:17 285:14 loved 214:1 low 28:19 64:9 163:2 169:8 188:22 250:3 **low-carbon** 130:11, 22 250:17, 18 Low-carbon/highoctane 131:8, 17 lower 60:21 79:8 92:13 100:20 102:22 130:11 162:17, 18 186:9 233:2 258:17 259:*1* lower-income 162:8 lowering 84:19 224:21 low-hanging 185:22 Low-income 32:18 87:20 99:13 143:21 149:16 151:6 165:18 208:2 217:13 256:21 275:2 low-wealth 96:2 141:19 149:22 150:17 154:11 216:3 Lucid 264:11 lucky 96:18 193:20 LUKE 3:6 68:18 69:1 lunch 14:21 132:18 133:8 Lung 27:9, 10 30:15, 22 32:12 95:20 110:20 113:13 242:1 245:3 267:15 268:21 lungs 111:19 215:12 256:15 lush 274:15

logic 66:3

luxury 104:4 226:9 240:5 **LVEJO** 4:10 **LYNN** 4:2 102:17 103:4 **Lynwood** 106:16 < M >**Mach-E** 147:8 machinery 100:4 MADELINE 6:16 219:16 **Madison** 274:12 **Madres** 111:4 228:2 Madrid 46:8 **magic** 195:3 magnitude 64:2 main 144:3 202:19 233:14 259:19 280:15 Maine 27:9 Maine's 29:4 maintain 87:10 maintaining 49:21 117:4, 18 147:3 168:15 maintains 117:11 maintenance 23:18, 20 75:5 228:9 major 11:19 30:22 111:11 143:19 150:1, 8 206:19 212:4, 22 218:14 258:5 259:9 majorities 175:20 176:13 majority 101:7 174:16 176:7, 12 263:16 maker 120:12 makers 286:12 making 13:7 14:6 19:1 46:1 56:11, 16 96:11 99:9 107:13 141:1 144:20 147:2, 19 186:6 194:17 197:18 202:14 207:12 223:1 225:7 229:14 234:1 236:15 260:4 261:1 268:2 285:19 malfeasance 92:19 manage 53:11 Management 5:5, 10 16:21 38:17 155:20

Manager 187:19 managers 54:2 mandating 66:20 MANN 3:18 93:21 235:20 manner 65:18 147:15 manufacture 233:19 manufacturer 159:17 Manufacturers 4:12 29:6 43:1, 3 49:16, 22 100:3 125:6, 21 139:4 145:8 147:18 160:5 165:9 171:21 172:10 178:4 194:18 207:7, 12, 17, 21 208:22 241:17 271:11 manufacturing 85:16 88:3, 10, 15, 20 89:2, 5, 8 90:5, 7 91:5 93:7 94:22 125:8 166:15 243:17 261:4 265:16 map 189:9 MARC 6:18 220:7 230:6, 10 March 178:6 MARCOT 4:22 149:8, 11 margin 174:14 192:10 marginal 42:7 marginalized 105:16 margins 271:14 **MARGUERITE** 2:12 27:2, 6 **Maria** 16:13 **MARIE** 2:7 16:16 Marietta 221:5 MARILYN 2:8 19:15, 18 marine 123:17 238:8 **MARIO** 3:12 84:1, 5 **MARK** 3:4 9:3 46:21 64:22 65:1, 11 264:6 marked 212:6 market 21:1 62:8 121:2 142:8, 11 171:14 172:14 178:11 222:5 226:15 240:7

257:15 263:16 264:22 marketed 169:12 Marketing 84:6 marketplace 84:15 142:5 markets 71:4 172:6 **Marnie** 98:15 **MARTIN** 2:10 22:14, 19 MARY 3:2 59:2, 4, 14 243:4, 7 **Maryland** 19:21 173:22 200:8, 13 mask-like 202:3 **Mason** 176:3 mass 85:5 **massive** 170:22 256:*1* match 74:22 material 85:12 materials 89:4 120:19 Mathews 243:4, 7 matter 181:6 202:19 259:12 **maximize** 63:14 71:14 93:6 271:13 maximizes 44:5 maximum 52:2 172:3 243:20 mayor 283:10 McGUIRE 5:21 181:20 McQuire 211:15, 20 meals 168:16 mean 78:14 262:11 meaningful 254:1 284:16 means 74:14 99:15 107:8 114:9 185:7 200:1 207:2 231:9 239:4 257:1, 6 261:22 281:10, 12 282:22 measured 68:6 measurements 280:12 measures 106:2 122:17, 21 192:1, 11 meat 203:1, 15 mechanical 136:22 mechanisms 147:21 239:19 240:12 279:5 Medicaid 103:7

medical 18:18 161:13 medicine 215:10 229:10 258:20 267:3 274:6 medicines 229:11 **medium** 263:15 medium-duty 12:14 meet 11:8 25:18 36:10 41:22 47:4 64:10 71:16 89:6 90:3 95:9, 11 109:3 112:14 119:17 125:14 130:4 131:6 139:4 141:14, 15 148:10, 14 151:22 154:17 190:10 194:16 210:1 264:3 265:3 278:16, 20 meeting 28:8 71:4, 10 122:14 127:2 133:5, 8 244:5 277:12 279:1, 17 meetings 223:7 273:4 meets 20:18 **mega** 50:1 MELINDA 4:15 129:8 132:10 190:19, 22 melting 104:6 MELTON 7:7 237:18 240:22 241:5, 7 MEMA 125:6, 7, 22 126:4, 10, 15, 19, 20 127:4 member 54:22 81:2 94:17 98:8 113:7 116:4 117:3 167:22 170:8 221:5 223:22 227:18 228:2 230:15 238:9 252:15 255:6 263:13 members 14:8 15:*1* 69:*5* 97:*19* 106:22 110:12 152:13 165:3 210:8 214:20 258:1 264:11 266:8 membership 184:22 memories 229:5 mental 35:9, 14, 16 256:11 269:5

mentality 215:15

mention 235:5 282:5 mentioned 94:16 211:2 289:6 mentioning 216:2 menu 49:21 merely 33:9 message 73:5 207:4 286:22 met 211:1 240:11 metals 120:19 177:22 methane 282:3 method 124:12 **Methodist** 2:13, 19 3:20 32:1 44:13 52:10 54:5 98:9 99:8 methodologies 270:12 Methods 203:17 metric 17:9 97:13 250:16 265:8 metric-based 123:22 **Metro** 137:3 metropolis 144:12 Metropolitan 72:16, 18, 19 143:7 Mexico 52:9, 10 255:20 MFV 6:13 **Miami** 106:5 MICHAEL 2:4 6:19 8:18 220:22 221:1, 4 255:21 MICHEL 2:22 7:4 54:12, 15 Michigan 3:11 4:14 5:12 43:17 59:*15* 80:22 81:*1*. 9, 15 83:2, 20 137:11 138:10, 18, 21 149:14 151:4, 15 165:1, 13 166:4, 9, 19 260:6 Michigan's 137:1 Mid 27:10 197:9 mid-century 210:19 middle 41:11 104:8 middle-class 88:6 mid-level 250:11 251:15 midst 223:8 mid-term 156:22 migrated 284:22 Mike 289:6 mile 49:21 71:9

77:18 78:7,9

92:22 93:1 97:20 157:11 239:3, 9, 14 mileage 63:13 207:15 222:19 230:17, 19 234:6, 11 235:10 miles 24:7, 8, 18 25:2 39:4 62:10 78:20, 22 159:22 168:13 169:3 188:*17* 189:*13* military 100:4 millennia 78:12 million 17:9 50:1 62:5 67:3 69:5 78:*13* 82:*4* 97:*13* 110:11 113:17 119:4 143:15 151:5 152:*13* 156:3 165:14 171:18 250:15 252:22 260:20 265:8 millions 36:13 143:17 171:21 Milwaukee 252:16 253:15 274:5 mind 215:16 265:2 mine 21:4 145:13, 18 153:15 **minimize** 147:22 **minimizing** 198:*15* minimum 62:15 245:18 mining 120:19 **Ministry** 168:1 minivan 20:11 minority 208:2 **MINOTAS** 5:12 164:19, 21, 22 minute 32:4, 6 61:1 114:16 minutes 14:7, 13 16:5 25:5 53:4 136:7 246:15 **miserable** 202:14 **misfortune** 171:*15* misinformation 73:17 missed 99:5 131:20 132:8 272:3 misses 264:5 missing 150:7 mission 45:2 69:10 107:4 117:3 118:18 263:11 Mississippi 260:2 Missouri 277:8, 9 Missourian 277:10

mistake 61:2 67:18 mitigate 35:5 163:15 244:22 **mitigated** 260:13 mix 78:6 mixed 227:17 mixes 114:1 mixing 34:10 79:8 **Mobile** 2:3 115:21 156:4 mobility 54:21 77:10 80:11 84:13 88:1 123:17 144:19 mobilize 118:19 mode 185:9 MODEL 1:5 8:4 10:17 12:14, 15 17:*3*, *5* 30:8 50:2*1* 51:2, 12 69:19 70:6, 13, 22 71:8, 12 77:15 85:3 93:1 95:1 116:10 134:4 157:10 175:4 178:3, 8 188:8 190:*14* 193:19 198:17 217:10, 17, 19, 21 229:21 243:11 247:9 264:5, 20 273:13 286:7 **modeling** 50:2, 8 119:18 180:7, 8 models 39:8, 20 43:2 123:4 264:16 278:22 280:12 moderate 81:13 213:7 moderating 245:15 moderation 291:13 MOG 6:17 219:21 **mold** 82:8 MOLLIE 7:4 **mom** 16:18 45:7, 9 187:18 199:13 moment 44:16 45:5 47:1 71:16 92:14 148:14 154:17 167:4 186:4 218:8 **Moms** 3:19 4:3, 4, 22 6:8, 9, 12 94:11, 17 97:18 110:8, 10, 11 111:3 113:7 149:12 184:20 187:17, 19 193:3 196:13 201:13 214:16 228:3 Monday 291:15

money 46:18 70:10 73:10 145:19 154:9 160:2 166:13 175:*17* 181:*1* 186:17 204:10 231:7 268:7 Monitoring 253:10 monster 83:1 month 11:19 12:8 23:13, 15 81:9 82:*3* 85:*21* 108:*13* 218:11 283:14 monthly 23:17 months 108:14 213:2, 7 215:*11* 226:4 month's 217:20 monumental 12:1 **MOORE** 4:*3* 110:4, 7, 8 moral 83:13 108:5 121:7, 10 morality 199:19 **Moran** 9:1 morning 8:2, 11 19:18 22:17, 18 26:13 27:5 44:11 52:8 54:15 60:14 61:5 68:21 72:13 77:6 84:4 87:6 94:10 98:6 106:14 110:7 115:16 122:8 129:17 132:16, 21 134:14 173:13 188:21 258:17 259:1 **mother** 32:2 94:17 98:7 112:4 149:*14* 191:*3* 193:6 227:21 237:8, 11 motivated 20:1 203:13 Motor 4:12, 21 5:3 125:5, 7, 16 146:11 271:4 motors 24:6 **Mount** 92:6 **mountain** 115:1 mountains 115:5 move 21:21 22:12 26:22 31:11 38:4 72:5 76:15 77:1 83:17 94:5 120:9 122:3 129:12 139:19 149:4 155:12 156:17 181:18 182:14 187:11 212:13, 17 214:5 216:20

220:5, 19 227:7 237:2 246:7 249:5 251:1 252:7 254:7, *21* 260:*14* 263:*3* 271:5 moved 32:8 45:15 197:9 198:3 200:8 215:8 movement 179:22 moves 124:5 Moving 36:7 51:8 89:17 104:10 165:11 166:7 189:20 195:7, 12 215:3, 5 232:13 249:11 258:18 261:4 277:17 279:10 282:19 MROZ 247:4 Mt 188:15 much-needed 69:15 70:1 131:5 156:*18* multifamily 25:13 **multiple** 125:18 multiplier 49:5 multipliers 49:13 57:2 70:12, 18 141:12 157:19 265:13 multi-pollutant 12:12 218:7 multistory 25:13 **Municipal** 197:16 musician 227:21 Mustang 147:7 muted 15:9 135:4 < N >

NACAA 115:22 116:9, 15 117:20 name 8:7 16:14 19:16, 18 22:6, 15, 19 26:18 27:3, 5 31:19 33:20 34:2 37:15, 21 38:7, 12 40:22 44:9 48:14 52:6 54:13 56:7 58:13, 21 59:3, 9, 13 60:12 61:5 65:3 68:20 69:1 71:21 72:8, 13 76:4, 12, 20 77:4, 6 80:18, 21 84:2, 5 87:4, 6 90:14, 17 93:15 94:8, 10, 16 98:3, 5 102:7, 15, 18 103:4 106:12 110:5, 7 113:1, 7 115:13 118:10, 12 121:2*1* 122:6

125:3 128:12, 20 129:4, 15, 17 134:7 135:15 136:1, 16 139:16, 22 140:4 142:22 143:3 146:7 149:9 152:5, *9* 155:9, *15* 159:6, 8 161:5, 11 164:7, 19, 22 167:16, 20 170:5, 7 172:21 173:7, 15 177:6, 10, 11 179:13, 19 182:1, 8, 17 183:21 184:3, 6, 17 187:6, 15, 16 190:20, 22 192:21 193:2 196:3, 8 200:4, 6 201:9, 11 205:14, 22 206:6 209:10, 17 211:18, 20 214:13, 15 216:15, 22 217:2 219:18 220:2, 9 221:2 223:18, 21 227:2, 10, 14 232:2, 10, 19 233:7 236:4 238:3 241:4, 7 243:5 247:20 249:1, 9, 16, 22 250:2 252:2, 9, 11 254:16 255:1, 5 257:19, 21 262:20 263:6, 7 266:20 267:1 269:19 270:6, 7 272:11 273:20, 21 277:3, 7 279:22 280:2 283:21 284:2, 3 nameplates 147:6 names 14:5 182:7, name's 184:18 narrow 192:15 narrowed 49:3 NASA 78:11 **Natalia** 182:16 183:*1* 192:20 193:2 **Natalia's** 187:*18* NATALIE 2:18 40:21 41:2 NATALIR 6:5 **nation** 30:6 43:5 95:18 113:10 121:9 227:18 257:11 279:10 **National** 4:5, 16 16:18 56:12 65:22 66:4 110:9 115:19, 22 116:13 117:4, 10 118:13 119:5

129:18 174:12

177: <i>12</i> 179:2 <i>1</i> 188: <i>6</i> 199: <i>15</i>
202:9 230:1 234:21 242:3
260: <i>17</i> 261: <i>6</i>
Nations 104:12 233:10 238:11
nation's 29:5 125:8 127:3, 21
188:2 nationwide 30:16
31:3 42:22 110: <i>11</i> 228: <i>12</i>
Native 228:4 Natural 3:6 39:12
69:2 79:5, 20 88:22 114:2
171: <i>12</i> 179: <i>4</i> 224: <i>11</i> 228: <i>10</i>
282:6, 12 283:9 naturally 172:13
nature 215:18 238:7
naught 41: <i>14</i> NBC 154: <i>20</i>
NCGA 131: <i>15</i> near 30: <i>21</i> 32: <i>14</i>
150: <i>1</i> 158:20 193:20 208: <i>13</i>
212:21 221:10 268:18 275:21
193:20 208:13 212:21 221:10 268:18 275:21 nearby 92:6 115:5 nearly 50:14
51:16 54:19 87:17 95:21 97:18 121:5
145: <i>1</i> 2 146: <i>1</i> 2 165: <i>1</i> 3 168: <i>1</i> 3
189: <i>12</i> 219: <i>4</i> 239: <i>10</i> 256:9
near-term 68:2 71:14 97:5 217:17, 22
necessary 30:11 44:3 56:14 57:4
66:4 83:18 122:21 141:4 160:17
171:22 198: <i>18</i> 257: <i>3</i> 278: <i>9</i> 286: <i>3</i> ,
13 need 20:2, 21 21:9
23:7 25:8 26:6 27:18 28:13 35:6
43:8 44:15 45:21 46:18 48:20 49:7
50:8 56:18 60:6, 17 62:14 64:14
65:1 79:10 93:6 102:21 113:3
119: <i>17</i> 130: <i>12</i> 137: <i>16</i> 140: <i>14</i>

•
145:7 148:13, 14
153: <i>3</i> 160: <i>7</i> , <i>14</i>
163: <i>11</i> 165:8
167:12 169:1, 6, 19
179: <i>15</i> 180: <i>16</i> 182: <i>19</i> 190: <i>6</i>
192:6, 8 194:6
195:6, 10 196:20
199:7 201:3 206:4
211:7, 16 212:16
222:22 223:2
218: <i>18</i> 220: <i>12</i> 222:22 223:2 229: <i>15</i>
231:3 233:2, 15
234: <i>17</i> 235: <i>1</i> , <i>15</i> , 20 236:22 237: <i>1</i> ,
20 230.22 237.1, 19 239:8 254:2
257:4 260:15
262:3, 4 270:4
276:5 282:17, 18,
21 284:17 286:1 needed 29:10
30:14 51:20 89:6
30:14 51:20 89:6 116:18 125:14 126:2 148:6 158:9
126:2 148:6 158:9 190:7 198: <i>15</i>
190:7 198: <i>15</i> 245:22
needlessly 14:1
needs 20:18 25:18
30:6 66:14, 15
90: <i>4</i> 111: <i>13</i> 127: <i>13</i> 171: <i>19</i>
179:7 257: <i>11</i>
269:10 278:9
negate 29:19
negative 64:8 68:6 124:9 166:2
174:21 275:6, 9
276:9
neighbor 118:22
neighborhood 114: <i>12</i> 150:2, <i>3</i>
197:4 212:1 214:4
215:8
neighborhoods
146: <i>3</i> 212:2 242:2, <i>3</i>
neighboring 162:2
neighbors 43:10
150:9 212:9, <i>11</i> 277:20
Neilson 174:13
neither 264:18
NEPA 180:6
net 41:17 44:5
70:5 125:15 130:18 154:21
171:22 172:15
242:11 267:6

119:5 152: <i>13</i>
neutral 66:14
neutral 66: <i>14</i> Nevada 110: <i>12</i>
111:4 113:8, 9 114:17
114:17
Nevadans 111: <i>19</i>
never 24:12 47:7
78:12 200:12
215:7 224:13
225:22 237:5
241:20 283:7
new 12:12 13:6
20:10, 12 22:20
23:19 24:3 27:10 36:14 43:11 52:9,
36:14 43:11 52:9,
10 54:19 55:9 62:5 72:15, 18
74:4, 10 75:6 83:8
85:21 92:13 97:5
104:15 106:4
114:6, 13 119:10
120:19 121:3, 7
123:9 125:12
141.3 142.6 10
143:15, 18 144:13
143:15, 18 144:13 153:4 155:2 158:4 160:13 166:15 178:17 179:6 189:20 202:20
160:13 166:15
178: <i>17</i> 179: <i>6</i>
189:20 202:20
204:5, 11 215:6
218:9, 13 219:2
221:17 222:12, 14
230:17, 18, 20
238:16, 20 240:10
257:15 264:15, 19,
22 270:21 274:3, 5
279:15 284:2
290:7, 20 newborns 267:6
newer 20.20
newer 29:20 178:8 179:2
NEWHOUSE 3:8
72:7, 10, 12, 13
news 11: <i>17</i> 91: <i>15</i>
130:6 189: <i>1</i>
NHTSA 55:12
84:10 148:3
NITTEGAL FT. 0 01
NH1SA'S 57:8, 21 NICK 6:2 182:10 206:3, 9
206:3, 9
nickel 120: <i>15</i>
NICOLE 4:22
149:8, 11 niece 44:20 222:13
mece 44:20 222:13
night 104:18 215:4
nine 56:1 73:21
123:6 193:7 245:7
Niro 59:16 Nissan's 270:16
Nissan's 270: <i>16</i> NOAA 224: <i>15</i>
11UAA 444.13

noble 171:22
177: <i>16</i>
nomad 201:14
nominal 23:14
non 34:3 72:19
165:14
non-attainment
42:7 117: <i>1</i> 158: <i>11</i>
non-Hispanic 99:18
nonpartisan 115:22
nonprofit 61:7
115:22 209: <i>19</i>
non-renewable
160: <i>3</i>
non-toxic 64:9
non-toxic 64:9 non-white 87:20
norm 45:14 91:20
normal 189:20
normally 25:2
92:2 178:5
North 32:13
143:5 167:20
177:21 208:7, 9, 16
212:8 258:11
Northern 42:6 Northside 208:10 Northwest 170:9
Northside 208:10
Northwest 170:9
189:4 201:22
202: <i>1</i>
Norway 120:21
•
Norway's 121:3
Norway's 121:3
Norway's 121:3 nose 197:2
Norway's 121:3 nose 197:2 Notably 86:9
Norway's 121:3 nose 197:2 Notably 86:9 note 14:17 35:21
Norway's 121:3 nose 197:2 Notably 86:9 note 14:17 35:21 57:6 151:5 202:7
Norway's 121:3 nose 197:2 Notably 86:9 note 14:17 35:21 57:6 151:5 202:7 223:7 237:22
Norway's 121:3 nose 197:2 Notably 86:9 note 14:17 35:21 57:6 151:5 202:7 223:7 237:22 270:16
Norway's 121:3 nose 197:2 Notably 86:9 note 14:17 35:21 57:6 151:5 202:7 223:7 237:22 270:16
Norway's 121:3 nose 197:2 Notably 86:9 note 14:17 35:21 57:6 151:5 202:7 223:7 237:22 270:16 noted 116:15 117:9 185:12
Norway's 121:3 nose 197:2 Notably 86:9 note 14:17 35:21 57:6 151:5 202:7 223:7 237:22 270:16 noted 116:15 117:9 185:12 255:13
Norway's 121:3 nose 197:2 Notably 86:9 note 14:17 35:21 57:6 151:5 202:7 223:7 237:22 270:16 noted 116:15 117:9 185:12 255:13 notes 156:10
Norway's 121:3 nose 197:2 Notably 86:9 note 14:17 35:21 57:6 151:5 202:7 223:7 237:22 270:16 noted 116:15 117:9 185:12 255:13 notes 156:10 notice 188:14
Norway's 121:3 nose 197:2 Notably 86:9 note 14:17 35:21 57:6 151:5 202:7 223:7 237:22 270:16 noted 116:15 117:9 185:12 255:13 notes 156:10 notice 188:14 noticing 285:16
Norway's 121:3 nose 197:2 Notably 86:9 note 14:17 35:21 57:6 151:5 202:7 223:7 237:22 270:16 noted 116:15 117:9 185:12 255:13 notes 156:10 notice 188:14 noticing 285:16 notification 15:11
Norway's 121:3 nose 197:2 Notably 86:9 note 14:17 35:21 57:6 151:5 202:7 223:7 237:22 270:16 noted 116:15 117:9 185:12 255:13 notes 156:10 notice 188:14 noticing 285:16 notification 15:11 37:4 58:5 75:18
Norway's 121:3 nose 197:2 Notably 86:9 note 14:17 35:21 57:6 151:5 202:7 223:7 237:22 270:16 noted 116:15 117:9 185:12 255:13 notes 156:10 notice 188:14 noticing 285:16 notification 15:11 37:4 58:5 75:18 101:21 128:4
Norway's 121:3 nose 197:2 Notably 86:9 note 14:17 35:21 57:6 151:5 202:7 223:7 237:22 270:16 noted 116:15 117:9 185:12 255:13 notes 156:10 notice 188:14 noticing 285:16 notification 15:11 37:4 58:5 75:18 101:21 128:4 135:7 163:21
Norway's 121:3 nose 197:2 Notably 86:9 note 14:17 35:21 57:6 151:5 202:7 223:7 237:22 270:16 noted 116:15 117:9 185:12 255:13 notes 156:10 notice 188:14 noticing 285:16 notification 15:11 37:4 58:5 75:18 101:21 128:4 135:7 163:21
Norway's 121:3 nose 197:2 Notably 86:9 note 14:17 35:21 57:6 151:5 202:7 223:7 237:22 270:16 noted 116:15 117:9 185:12 255:13 notes 156:10 notice 188:14 noticing 285:16 notification 15:11 37:4 58:5 75:18 101:21 128:4 135:7 163:21
Norway's 121:3 nose 197:2 Notably 86:9 note 14:17 35:21 57:6 151:5 202:7 223:7 237:22 270:16 noted 116:15 117:9 185:12 255:13 notes 156:10 notice 188:14 noticing 285:16 notification 15:11 37:4 58:5 75:18 101:21 128:4 135:7 163:21 183:10 205:6 231:16 247:13 noting 141:13
Norway's 121:3 nose 197:2 Notably 86:9 note 14:17 35:21 57:6 151:5 202:7 223:7 237:22 270:16 noted 116:15 117:9 185:12 255:13 notes 156:10 notice 188:14 noticing 285:16 notification 15:11 37:4 58:5 75:18 101:21 128:4 135:7 163:21 183:10 205:6 231:16 247:13 noting 141:13 Novellas 84:6
Norway's 121:3 nose 197:2 Notably 86:9 note 14:17 35:21 57:6 151:5 202:7 223:7 237:22 270:16 noted 116:15 117:9 185:12 255:13 notes 156:10 notice 188:14 noticing 285:16 notification 15:11 37:4 58:5 75:18 101:21 128:4 135:7 163:21 183:10 205:6 231:16 247:13 noting 141:13 Novellas 84:6 85:18
Norway's 121:3 nose 197:2 Notably 86:9 note 14:17 35:21 57:6 151:5 202:7 223:7 237:22 270:16 noted 116:15 117:9 185:12 255:13 notes 156:10 notice 188:14 noticing 285:16 notification 15:11 37:4 58:5 75:18 101:21 128:4 135:7 163:21 183:10 205:6 231:16 247:13 noting 141:13 Novellas 84:6 85:18 November 46:14
Norway's 121:3 nose 197:2 Notably 86:9 note 14:17 35:21 57:6 151:5 202:7 223:7 237:22 270:16 noted 116:15 117:9 185:12 255:13 notes 156:10 notice 188:14 noticing 285:16 notification 15:11 37:4 58:5 75:18 101:21 128:4 135:7 163:21 183:10 205:6 231:16 247:13 noting 141:13 Novellas 84:6 85:18 November 46:14 178:5
Norway's 121:3 nose 197:2 Notably 86:9 note 14:17 35:21 57:6 151:5 202:7 223:7 237:22 270:16 noted 116:15 117:9 185:12 255:13 notes 156:10 notice 188:14 noticing 285:16 notification 15:11 37:4 58:5 75:18 101:21 128:4 135:7 163:21 183:10 205:6 231:16 247:13 noting 141:13 Novellas 84:6 85:18 November 46:14 178:5 NOx 281:3
Norway's 121:3 nose 197:2 Notably 86:9 note 14:17 35:21 57:6 151:5 202:7 223:7 237:22 270:16 noted 116:15 117:9 185:12 255:13 notes 156:10 notice 188:14 noticing 285:16 notification 15:11 37:4 58:5 75:18 101:21 128:4 135:7 163:21 183:10 205:6 231:16 247:13 noting 141:13 Novellas 84:6 85:18 November 46:14 178:5 NOx 281:3 NOYES 7:9
Norway's 121:3 nose 197:2 Notably 86:9 note 14:17 35:21 57:6 151:5 202:7 223:7 237:22 270:16 noted 116:15 117:9 185:12 255:13 notes 156:10 notice 188:14 noticing 285:16 notification 15:11 37:4 58:5 75:18 101:21 128:4 135:7 163:21 183:10 205:6 231:16 247:13 noting 141:13 Novellas 84:6 85:18 November 46:14 178:5 NOx 281:3 NOYES 7:9 249:21 250:1, 2
Norway's 121:3 nose 197:2 Notably 86:9 note 14:17 35:21 57:6 151:5 202:7 223:7 237:22 270:16 noted 116:15 117:9 185:12 255:13 notes 156:10 notice 188:14 noticing 285:16 notification 15:11 37:4 58:5 75:18 101:21 128:4 135:7 163:21 183:10 205:6 231:16 247:13 noting 141:13 Novellas 84:6 85:18 November 46:14 178:5 NOx 281:3 NOYES 7:9 249:21 250:1, 2 NPRM 122:16
Norway's 121:3 nose 197:2 Notably 86:9 note 14:17 35:21 57:6 151:5 202:7 223:7 237:22 270:16 noted 116:15 117:9 185:12 255:13 notes 156:10 notice 188:14 noticing 285:16 notification 15:11 37:4 58:5 75:18 101:21 128:4 135:7 163:21 183:10 205:6 231:16 247:13 noting 141:13 Novellas 84:6 85:18 November 46:14 178:5 NOx 281:3 NOYES 7:9 249:21 250:1, 2

70:11, 21 71:12 NRDC's 69:4 nuclear 80:3 NUMBER 1:7 16:7 17:7 28:16 37:16 40:9, 15 49:17 51:12 58:22 72:20 76:13 78:18 94:19 102:16 105:18 110:21 111:*1* 128:2*1* 136:2, 9 145:*1* 168:8 169:10, 21 183:22 184:4 206:1 224:10 232:11 242:18 256:7 269:20 272:11, 16 **numbers** 172:15 181:*1* **NUNEZ** 2:2 nurse 286:18 Nurses 5:18 98:22 255:6 284:4 nursing 255:6 **NW** 1:21

<O> **Obama** 69:14 70:2 82:20 106:1 211:11 221:19 242:22 261:9, 18 Obama/Biden 26:8 45:19 74:16, 22 92:17 119:8, 21 140:12, 15 231:10 **Obama-era** 225:*3* 231:11 **obey** 66:5 objective 62:1 171:22 objectives 62:21 obligation 108:5 observer 46:8 **obvious** 47:13 62:4 **obviously** 201:21 202:8 204:2 215:11 251:1 **occasion** 95:10 occasionally 79:17 occupy 238:10 occur 255:9 **occurred** 228:11 ocean 104:5 197:22 oceans 282:16 octane 62:15, 16,

Network 7:4

19, 20 63:8, 12, 15, 18 64:6, 10, 15

131:5

Off Cyrolo 40-14
Off-Cycle 49:14,
20 126:10 141:12 266:4
offer 81:6 86:10
130:6 179:1 262:9
offered 81:10
offering 40:17
offering 40: <i>17</i> Office 2: <i>3</i> , <i>5</i> 8: <i>12</i> ,
19 9:2, 3, 9, 20
291:8
officer 8:20 13:21
155: <i>18</i>
official 274: <i>1</i>
officials 107:6
140:18
offset 23:16
offsetting 11:10
offshored 88:4
oftentimes 168:9
Oh 24: <i>1</i> 61: <i>1</i> 101:9 281: <i>16</i> , <i>19</i>
Ohio 94:11, 18, 19
95:2, 6, 18, 21
97:19 129:19
170:9
Ohio's 95:9
oil 23:19 79:21
80:1 171:5, 7
175:21 241:15
271: <i>14</i>
oils 131: <i>14</i>
Okay 59:12 61:1,
<i>4</i> 65:9 77: <i>13</i>
101:9, 10, 14, 15, 18
103: <i>4</i> 118: <i>17</i>
122:3 132:15
139:19 161:8, 10
177:8 183:7
184: <i>13</i> 216:20 220:5 227:7
232:22 233:4, 6 249:20 254:21
263:3 267:1 272:7
291:6
Oklahoma 105: <i>1</i>
Oklahoma's 103:7
old 42:12 53:8
200:7 212:1, 2
200:7 212: <i>I</i> , 2 254:6
older 111:8, 19
142:7 265:10
oldest 106:19
OLECHIW 2:4
8:11, 18 101:3, 10,
12, 15 132:19
154:12 195:17
12, 15 132:19 134:12 195:17 246:13 248:12 272:15 288:5
291:2, 6
OLIVER 6:16
GLIVER U.IU

219:16
onboard 38:18
once 24:9 134:13
151:6 154: <i>15</i>
167:7 235:8, 10
242:20 264:1
one-and-a-half
255:15
ones 19: <i>10</i> 160: <i>20</i> 186: <i>20</i> 214: <i>1</i>
ongoing 10:10
210:7
online 13:3 69:5
onslaught 53:22
onward 224:8
onwards 75:1
open 130:20
132:3 178:6 213:8
operate 38:20
operated 208:13 operates 208:10 operating 43:18,
operating 43:18,
19 61:22
operation 67:11
operators 56:7
opportunities
89:20 94:21 250:9
opportunity 13:9 19: <i>19</i> 22:2, <i>18</i>
27:12 31:22 33:22
38:9 41:5 43: <i>4</i>
38:9 41:5 43:4 51:21 54:1 59:13 60:9 63:9 65:13
60:9 63:9 65:13
73:17 75:12 83:14,
16 87:13 90:19
93: <i>10</i> 94: <i>12</i> 96: <i>20</i> 97: <i>19</i> 101: <i>1</i> 103: <i>5</i>
106:9 108:5
109:20 113:5
118:5 121:7, 11, 15
122:10 124:8
131:16, 20 132:20
134: <i>13</i> 137: <i>5</i>
139:9 140:2
143:10 145:21
149: <i>1</i> , <i>13</i> 152:8 154:5 155:5 156: <i>1</i>
154:5 155:5 156:1 159:2 161:2, 16
165:4 167:7, 18
171:20 172:17
173: <i>14</i> 177: <i>4</i>
179: <i>10</i> 190: <i>17</i>
191:2 192: <i>15</i>
193:4 201:12
209: <i>13</i> 211: <i>13</i> 215: <i>17</i> 216: <i>11</i>
213:1/ 210:11 217:4 218:3 221:7
217: <i>4</i> 218: <i>3</i> 221: <i>7</i> 241: <i>5</i> 246: <i>19</i>
252:18 258:3
261: <i>14</i> 263: <i>10</i>
266:13 269:21

271:21 273:6
284:8, 10 288:7, 14
opposed 212:10, 11
244:4, 17
opposition 204:9
205:2
oppressive 34:13
ops 46:16
optimistic 61:19
optimize 131:5
172:11
optimum 62:22
option 17:15
28:18 216:9
options 19:9 28:8,
21 29:11 88:1
97:8 115:6 126: <i>14</i>
oral 9:5 13:1,8
14:3, 6 134:16, 18
orange 137:22
245:8
Orca 189:2 Order 9:19 10:4 12:7 14:18 16:3 30:7 40:10 44:4
Order 9:19 10:4
12:7 14:18 16:3
30:7 40:10 44:4
51: <i>19</i> 65:2 113: <i>4</i> 136:5 141:8 153:2
136:5 141:8 153:2
166:9 178:4
182:2 <i>0</i> 185: <i>17</i>
186: <i>16</i> 190: <i>3</i>
218:11 220:13
235:21 237:20
238:18 239:1, 8 248:8 257:12 270:5 278:16 Orders 9:10, 14, 21
248:8 257:12
270:5 278:16
Orders 9:10, 14, 21
178:3
ordinary 191: <i>1</i>
Oregon 91:10, 16
92:1 202:11 268:5
organ 18:12
organic 168:15
organization 54:7
61:7 107:6 110:10 119:3 173:17
209:19
organizations 87:9
106:20 152:14
174:2
Organizer 110:8
184:19 206:13
214:16
organizers 209:15
Organizing 118:13
oriented 172:5
original 11:6 70:2
74:15 211:11
261:8
originally 75:13
139:6 261: <i>17</i>
originates 238:17
J

OSBOURN 5:20 177:9, *11* outages 255:9 outcomes 35:15 130:20 275:8, 16, 18 276:10 **outdated** 265:20 **outdoor** 34:12 113:20 189:7 258:16, 17, 21, 22 outdoors 96:20 215:17 **outline** 124:11 **outputs** 108:9 **outside** 64:16 94:18 190:1 195:11 200:19 210:13 272:5 283:4, 6 overall 26:1 116:19 127:5 174:16 overblown 204:6 overburdened 219:12 overlaps 212:5 overly 188:22 265:4 overnight 82:1 overpasses 274:16 overuse 171:12 overwhelmingly 19:3 39:12 162:9 197:7 owe 75:10 owned 210:15 222:12 owner 23:6 28:7 41:7 **owners** 11:10 180:21 ownership 23:11 owning 280:9 owns 222:17 ozone 34:4, 10 42:8, 9 110:22 158:11 199:5 245:9 258:17 259:1 < P > **p.m** 14:22 133:9 246:17 247:8 272:18 273:1, 2, 11 291:18 **Pacific** 189:*4* 283:11

package 50:14 packages 178:12 **PADMA** 4:14 129:1 132:10 136:16, 19 **PAER** 6:5 182:16 192:20 paid 204:10 **painful** 256:4 paint 178:11 204:4 pandemic 223:8 258:19 259:5 274:17 panel 8:22 14:9 35:1 165:3 225:12 229:21 244:10 291:*11* panelist 15:12 37:5 58:6, 16 59:6 75:19 76:7 80:19 101:22 102:10 128:5, 15 135:8, 18 163:22 164:10 173:10 179:16 182:20 183:2, 11 184:10, 15 196:5 205:7, 17 206:5 211:17 231:17 232:5, 17 235:21 236:2 237:20 241:*1* 247:*14* 248:1 270:2, 4 272:4 273:17, 18 277:2 287:16 288:3 289:17 290:18 panelists 170:1 panels 59:16 236:14 271:8 **panhandle** 210:*13* panhandling 210:10 **panic** 104:12 pants 78:17 paper 29:19 116:16 paradigms 170:18 paraphrase 224:15 parent 28:6 137:16 188:12 254:5 parents 112:5 150:1 153:18 195:*1* **Paris** 41:21 45:3 46:10, 13 146:17 244:19 parity 265:18 **Park** 193:21 213:14, 19 215:11, 13

parked 24:16

parks 114: <i>14</i> , <i>19</i>
234:2 <i>1</i>
part 39:16 47:10,
11 67:8, 10, 16, 17
69: <i>16</i> 103: <i>9</i> 119: <i>4</i> 123: <i>8</i> 127:2
129:21 130:15
148:17 160:3
171: <i>19</i> 185: <i>16</i>
200:2 <i>1</i> 201: <i>1</i>
238:18 255:7
259:14 260:18
partake 89:21
participant 167:21
participants 288:10 participate 118:5
251: <i>19</i> 291: <i>10</i>
participating
285:20
participation 77:8
particle 275:7, 11
particular 179:2
275: <i>17</i> particularly 49: <i>7</i>
70: <i>15</i> 89: <i>16</i> 112: <i>4</i>
178:14 208:8
265:4 275:15
276:4 278:5 281:3
particulate 181:6
259:11
particulates 64:7
parties 9:6 134:18 207:20 208:20
partner 152:13
173:2 <i>1</i> 178:22
parts 78:13 81:17
89:4 171:18
274:15
pass 239:6
passage 233:22
passed 81: <i>13</i> 111: <i>10</i> 150: <i>10</i>
229:12 261:8
passenger 17:1
30:17 43:12 74:10
97:16 107:16
116: <i>17</i> , <i>21</i> 141: <i>3</i>
188:7 193:18
198:16 204:20
218:9, <i>13</i> 219:2 230:2 234: <i>13</i> , <i>15</i> ,
230.2 234.13, 13, 17 238:20 259:20
passengers 234: <i>13</i>
passes 32:10 passing 239:4
passing 239:4
passionate 161: <i>14</i>
284:5 285:5 path 19:3 25:20
path 19:3 25:20 36:13 71:15 97:4
123:2 124:5

154:20 178:2 <i>1</i>
218:12 269:13
paths 276:2
pathway 131:6
pathways 130:20 131:17
patient 268:5
patients 28:10
30:2 31:6 267:10,
12, 15 268:1, 14, 20 269:14 274:10, 18, 20 275:1, 19
20 275:1, 19
276: <i>17</i> 287: <i>1</i>
patron 189: <i>3</i> PAUL 5:20 6:21
177:9, 11 226:22
pause 272:12, 14,
18, 22 273:1, 7
289:18 290:8, 21
paused 19:6 pave 144:13
paves 36:8
pay 43:16
paycheck 104:1
paying 104:19 payment 185:17
payment 183.17 payments 23:17
peak 40:3 171:5
Pearson 250:2
Pearson's 250:5
pediatrician 215:9
pediatrician 215:9 penetration 157:21 PENNOYER 2:12
pediatrician 215:9 penetration 157:21 PENNOYER 2:12 27:2, 5, 6
pediatrician 215:9 penetration 157:21 PENNOYER 2:12 27:2, 5, 6 Pennsylvania 32:8,
pediatrician 215:9 penetration 157:21 PENNOYER 2:12 27:2, 5, 6 Pennsylvania 32:8, 9 210:17 People 5:16 13:12
pediatrician 215:9 penetration 157:21 PENNOYER 2:12 27:2, 5, 6 Pennsylvania 32:8, 9 210:17 People 5:16 13:12 21:11 32:13, 18
pediatrician 215:9 penetration 157:21 PENNOYER 2:12 27:2, 5, 6 Pennsylvania 32:8, 9 210:17 People 5:16 13:12 21:11 32:13, 18 33:5 36:8 48:3
pediatrician 215:9 penetration 157:21 PENNOYER 2:12 27:2, 5, 6 Pennsylvania 32:8, 9 210:17 People 5:16 13:12 21:11 32:13, 18 33:5 36:8 48:3 52:18 53:7, 10
pediatrician 215:9 penetration 157:21 PENNOYER 2:12 27:2, 5, 6 Pennsylvania 32:8, 9 210:17 People 5:16 13:12 21:11 32:13, 18 33:5 36:8 48:3 52:18 53:7, 10 81:4 88:10, 12
pediatrician 215:9 penetration 157:21 PENNOYER 2:12 27:2, 5, 6 Pennsylvania 32:8, 9 210:17 People 5:16 13:12 21:11 32:13, 18 33:5 36:8 48:3 52:18 53:7, 10 81:4 88:10, 12 91:3 105:7 108:16
pediatrician 215:9 penetration 157:21 PENNOYER 2:12 27:2, 5, 6 Pennsylvania 32:8, 9 210:17 People 5:16 13:12 21:11 32:13, 18 33:5 36:8 48:3 52:18 53:7, 10 81:4 88:10, 12 91:3 105:7 108:16 109:13, 21 113:17 118:19, 21 119:4
pediatrician 215:9 penetration 157:21 PENNOYER 2:12 27:2, 5, 6 Pennsylvania 32:8, 9 210:17 People 5:16 13:12 21:11 32:13, 18 33:5 36:8 48:3 52:18 53:7, 10 81:4 88:10, 12 91:3 105:7 108:16 109:13, 21 113:17 118:19, 21 119:4 138:20 141:19
pediatrician 215:9 penetration 157:21 PENNOYER 2:12 27:2, 5, 6 Pennsylvania 32:8, 9 210:17 People 5:16 13:12 21:11 32:13, 18 33:5 36:8 48:3 52:18 53:7, 10 81:4 88:10, 12 91:3 105:7 108:16 109:13, 21 113:17 118:19, 21 119:4 138:20 141:19 150:3, 16, 18 163:3
pediatrician 215:9 penetration 157:21 PENNOYER 2:12 27:2, 5, 6 Pennsylvania 32:8, 9 210:17 People 5:16 13:12 21:11 32:13, 18 33:5 36:8 48:3 52:18 53:7, 10 81:4 88:10, 12 91:3 105:7 108:16 109:13, 21 113:17 118:19, 21 119:4 138:20 141:19 150:3, 16, 18 163:3
pediatrician 215:9 penetration 157:21 PENNOYER 2:12 27:2, 5, 6 Pennsylvania 32:8, 9 210:17 People 5:16 13:12 21:11 32:13, 18 33:5 36:8 48:3 52:18 53:7, 10 81:4 88:10, 12 91:3 105:7 108:16 109:13, 21 113:17 118:19, 21 119:4 138:20 141:19 150:3, 16, 18 163:3, 9 165:14 173:16, 18 176:16 178:11 180:21, 22 181:1,
pediatrician 215:9 penetration 157:21 PENNOYER 2:12 27:2, 5, 6 Pennsylvania 32:8, 9 210:17 People 5:16 13:12 21:11 32:13, 18 33:5 36:8 48:3 52:18 53:7, 10 81:4 88:10, 12 91:3 105:7 108:16 109:13, 21 113:17 118:19, 21 119:4 138:20 141:19 150:3, 16, 18 163:3, 9 165:14 173:16, 18 176:16 178:11 180:21, 22 181:1, 12, 13 185:10, 16
pediatrician 215:9 penetration 157:21 PENNOYER 2:12 27:2, 5, 6 Pennsylvania 32:8, 9 210:17 People 5:16 13:12 21:11 32:13, 18 33:5 36:8 48:3 52:18 53:7, 10 81:4 88:10, 12 91:3 105:7 108:16 109:13, 21 113:17 118:19, 21 119:4 138:20 141:19 150:3, 16, 18 163:3, 9 165:14 173:16, 18 176:16 178:11 180:21, 22 181:1, 12, 13 185:10, 16 186:7, 8, 16 191:18
pediatrician 215:9 penetration 157:21 PENNOYER 2:12 27:2, 5, 6 Pennsylvania 32:8, 9 210:17 People 5:16 13:12 21:11 32:13, 18 33:5 36:8 48:3 52:18 53:7, 10 81:4 88:10, 12 91:3 105:7 108:16 109:13, 21 113:17 118:19, 21 119:4 138:20 141:19 150:3, 16, 18 163:3, 9 165:14 173:16, 18 176:16 178:11 180:21, 22 181:1, 12, 13 185:10, 16 186:7, 8, 16 191:18 194:10 197:7
pediatrician 215:9 penetration 157:21 PENNOYER 2:12 27:2, 5, 6 Pennsylvania 32:8, 9 210:17 People 5:16 13:12 21:11 32:13, 18 33:5 36:8 48:3 52:18 53:7, 10 81:4 88:10, 12 91:3 105:7 108:16 109:13, 21 113:17 118:19, 21 119:4 138:20 141:19 150:3, 16, 18 163:3, 9 165:14 173:16, 18 176:16 178:11 180:21, 22 181:1, 12, 13 185:10, 16 186:7, 8, 16 191:18 194:10 197:7 198:7 201:20 202:2, 14 204:10
pediatrician 215:9 penetration 157:21 PENNOYER 2:12 27:2, 5, 6 Pennsylvania 32:8, 9 210:17 People 5:16 13:12 21:11 32:13, 18 33:5 36:8 48:3 52:18 53:7, 10 81:4 88:10, 12 91:3 105:7 108:16 109:13, 21 113:17 118:19, 21 119:4 138:20 141:19 150:3, 16, 18 163:3, 9 165:14 173:16, 18 176:16 178:11 180:21, 22 181:1, 12, 13 185:10, 16 186:7, 8, 16 191:18 194:10 197:7 198:7 201:20 202:2, 14 204:10 209:22 226:5
pediatrician 215:9 penetration 157:21 PENNOYER 2:12 27:2, 5, 6 Pennsylvania 32:8, 9 210:17 People 5:16 13:12 21:11 32:13, 18 33:5 36:8 48:3 52:18 53:7, 10 81:4 88:10, 12 91:3 105:7 108:16 109:13, 21 113:17 118:19, 21 119:4 138:20 141:19 150:3, 16, 18 163:3, 9 165:14 173:16, 18 176:16 178:11 180:21, 22 181:1, 12, 13 185:10, 16 186:7, 8, 16 191:18 194:10 197:7 198:7 201:20 202:2, 14 204:10 209:22 226:5 236:15, 18 237:2, 4,
pediatrician 215:9 penetration 157:21 PENNOYER 2:12 27:2, 5, 6 Pennsylvania 32:8, 9 210:17 People 5:16 13:12 21:11 32:13, 18 33:5 36:8 48:3 52:18 53:7, 10 81:4 88:10, 12 91:3 105:7 108:16 109:13, 21 113:17 118:19, 21 119:4 138:20 141:19 150:3, 16, 18 163:3, 9 165:14 173:16, 18 176:16 178:11 180:21, 22 181:1, 12, 13 185:10, 16 186:7, 8, 16 191:18 194:10 197:7 198:7 201:20 202:2, 14 204:10 209:22 226:5 236:15, 18 237:2, 4, 12 238:12 248:18
pediatrician 215:9 penetration 157:21 PENNOYER 2:12 27:2, 5, 6 Pennsylvania 32:8, 9 210:17 People 5:16 13:12 21:11 32:13, 18 33:5 36:8 48:3 52:18 53:7, 10 81:4 88:10, 12 91:3 105:7 108:16 109:13, 21 113:17 118:19, 21 119:4 138:20 141:19 150:3, 16, 18 163:3, 9 165:14 173:16, 18 176:16 178:11 180:21, 22 181:1, 12, 13 185:10, 16 186:7, 8, 16 191:18 194:10 197:7 198:7 201:20 202:2, 14 204:10 209:22 226:5 236:15, 18 237:2, 4, 12 238:12 248:18 256:6, 22 258:19 259:3 268:13, 14,
pediatrician 215:9 penetration 157:21 PENNOYER 2:12 27:2, 5, 6 Pennsylvania 32:8, 9 210:17 People 5:16 13:12 21:11 32:13, 18 33:5 36:8 48:3 52:18 53:7, 10 81:4 88:10, 12 91:3 105:7 108:16 109:13, 21 113:17 118:19, 21 119:4 138:20 141:19 150:3, 16, 18 163:3, 9 165:14 173:16, 18 176:16 178:11 180:21, 22 181:1, 12, 13 185:10, 16 186:7, 8, 16 191:18 194:10 197:7 198:7 201:20 202:2, 14 204:10 209:22 226:5 236:15, 18 237:2, 4, 12 238:12 248:18

274:6 275:2, 3, 17 281:16 People's 3:21 98:10 282:7 peppy 222:16 perceived 171:4 percent 18:3 31:1 32:13 36:14 39:7 41:19 43:11 50:15 54:19 55:9, 22 56:1 71:1, 4, 6, 7 74:11, 15 78:6, 7, 9 79:22 80:1, 2 83:8, 12 87:18 96:10 97:4 109:4, 8 111:22 112:2 119:12, 15, 19 121:2 122:13 125:11 140:9, 11 141:1, 2 142:17 148:21 150:4 153:4 154:21 156:5 160:14 169:15 174:15, 18, 21, 22 175:5, 6, 13, 14, 15 176:7, 8, 9 206:18 218:9 226:13 233:21 238:20 242:10 250:19 262:8 263:12 264:5 percentage 79:8
perfect 101:12 199:4
perfected 233:18 perform 168:22
performance 35:14 86:3 126:4 278:6,
15 period 40:4 86:22
91: <i>11</i> 118: <i>7</i>
periodic 23:20 permanent 255:16
permits 213:15 persistence 210:20
persistent 208:16
persists 282: <i>16</i> person 16: <i>4</i> 136: <i>6</i> 141: <i>17</i> 149: <i>4</i>
141:17 149:4
180: <i>15</i> 228: <i>7</i> 253: <i>7</i> 280: <i>3</i>
personal 23:5
29:4, 8 38:22 39:2 107:5, 12 194:8
198:7 211:22
214: <i>3</i> 219: <i>7</i> 224: <i>3</i> 280: <i>5</i> 283: <i>1</i>
Personally 54:3
107:18 225:16 236:12 237:8 255:19 284:22
255:19 284:22

persons 12:22
53: <i>11</i> 91: <i>16</i> 141:2 <i>1</i>
person's 53:11
237: <i>11</i> perspective 143: <i>11</i>
271:22
PETELLE 6:19
220:22 221:4 PETER 6:10
196:2 201:8, <i>11</i>
petroleum 25:15 61:8
petroleum-fueled
23:10 Db D 25:6
Ph.D 35:6 phase 85:5
phasing 43:1
Philadelphia 210:9,
22 241:22 Philip 232:16 17
Philip 232:16, 17 233:7
PHILLIP 6:22
phobias 35:10 Phoenix 215:6
Phoenix 215:0 phone 22:9 26:20
37:16 38:2 58:22
65:1 72:3 76:13,
21 93:18 94:2
102:16 113:4 122:1 128:21
129:5 132: <i>13</i>
102: <i>16</i> 113: <i>4</i> 122: <i>1</i> 128:2 <i>1</i> 129:5 132: <i>13</i> 136:2 182:2 183:22 184: <i>3</i>
183:22 184:3
206: <i>1</i> 216: <i>18</i> 220: <i>13</i> 227: <i>5</i>
220:13 227:5 230:7 232:11
249: <i>3</i> , <i>18</i> 252: <i>5</i>
254:19 263:1
266:17 269:19
272:11 287:12
phones 15:18 37:11 58:12 76:3
102:6 128:11 135:14 164:6 183:17 205:13
135:14 164:6
183:17 205:13 232:1 247:19
photo 46:16
PHYLLIS 2:13
31:18 32:1
physical 17:22 256:10
physician 27:6
274:2, <i>4</i> pick 188:20
picked 45:15
Pickerington 94: <i>18</i> pickup 28: <i>4</i> , <i>12</i> , 22
pickup 28:4, 12, 22
29:3 50:11 74:1 85:22 86:2, 10
222:18 230:21

231:2 253:2 <i>1</i>
266: <i>1</i>
picnics 138:2
picture 65:9
251: <i>13</i>
piece 282: <i>10</i> PIEN 2: <i>18</i> 40:2 <i>1</i>
41:2
41:2
pile 255:22 269:7
pillar 54:6
Pipeline 105:4
pipelines 282:7
PISTORA 3:16
93: <i>13</i> 106: <i>11</i> , <i>14</i> ,
16
pivotal 44: <i>16</i>
place 10:8 34:5
place 10:8 34:5 35:8 51:12 56:14
55.0 51.12 50.14 64.1 69.12 110.17
64:1 68:13 110:17
124:4 189:/, 11
124:4 189:7, 11 places 20:15 53:9 111:1 185:4
111: <i>1</i> 185: <i>4</i>
224: <i>13</i>
placing 116: <i>11</i>
178:3
plain 63:13 238:15
plan 14:21 42:20
103:18 119:22
103.76 119.22
127:5, 8 128: <i>1</i>
140:19 144:13, 16,
1 17 18 176·1
17, 10 170.1
177:16, 20 178:20
140:19 144:13, 16, 17, 18 176:1 177:16, 20 178:20 179:6 257:8
177:16, 20 178:20 179:6 257:8 260:19
179:6 257:8 260: <i>19</i>
179:6 257:8 260: <i>19</i> planet 41: <i>16</i> , <i>17</i>
179:6 257:8 260:19 planet 41:16, 17 47:15, 20 69:7
179:6 257:8 260:19 planet 41:16, 17 47:15, 20 69:7 119:1 137:17
179:6 257:8 260:19 planet 41:16, 17 47:15, 20 69:7 119:1 137:17 138:20 191:9
179:6 257:8 260:19 planet 41:16, 17 47:15, 20 69:7 119:1 137:17 138:20 191:9 209:1, 16 255:15
179:6 257:8 260:19 planet 41:16, 17 47:15, 20 69:7 119:1 137:17 138:20 191:9 209:1, 16 255:15 279:3 282:17
179:6 257:8 260:19 planet 41:16, 17 47:15, 20 69:7 119:1 137:17 138:20 191:9 209:1, 16 255:15 279:3 282:17 planned 11:4 12:5
179:6 257:8 260:19 planet 41:16, 17 47:15, 20 69:7 119:1 137:17 138:20 191:9 209:1, 16 255:15 279:3 282:17 planned 11:4 12:5
179:6 257:8 260:19 planet 41:16, 17 47:15, 20 69:7 119:1 137:17 138:20 191:9 209:1, 16 255:15 279:3 282:17 planned 11:4 12:5 123:20 212:7 270:22
179:6 257:8 260:19 planet 41:16, 17 47:15, 20 69:7 119:1 137:17 138:20 191:9 209:1, 16 255:15 279:3 282:17 planned 11:4 12:5 123:20 212:7 270:22 planner 159:10
179:6 257:8 260:19 planet 41:16, 17 47:15, 20 69:7 119:1 137:17 138:20 191:9 209:1, 16 255:15 279:3 282:17 planned 11:4 12:5 123:20 212:7 270:22 planner 159:10
179:6 257:8 260:19 planet 41:16, 17 47:15, 20 69:7 119:1 137:17 138:20 191:9 209:1, 16 255:15 279:3 282:17 planned 11:4 12:5 123:20 212:7 270:22 planner 159:10 planning 103:15
179:6 257:8 260:19 planet 41:16, 17 47:15, 20 69:7 119:1 137:17 138:20 191:9 209:1, 16 255:15 279:3 282:17 planned 11:4 12:5 123:20 212:7 270:22 planner 159:10 planning 103:15 127:17 143:4, 9
179:6 257:8 260:19 planet 41:16, 17 47:15, 20 69:7 119:1 137:17 138:20 191:9 209:1, 16 255:15 279:3 282:17 planned 11:4 12:5 123:20 212:7 270:22 planner 159:10 planning 103:15 127:17 143:4, 9 159:11 180:19
179:6 257:8 260:19 planet 41:16, 17 47:15, 20 69:7 119:1 137:17 138:20 191:9 209:1, 16 255:15 279:3 282:17 planned 11:4 12:5 123:20 212:7 270:22 planner 159:10 planning 103:15 127:17 143:4, 9 159:11 180:19 plans 12:4 25:10
179:6 257:8 260:19 planet 41:16, 17 47:15, 20 69:7 119:1 137:17 138:20 191:9 209:1, 16 255:15 279:3 282:17 planned 11:4 12:5 123:20 212:7 270:22 planner 159:10 planning 103:15 127:17 143:4, 9 159:11 180:19 plans 12:4 25:10 104:2 175:2
179:6 257:8 260:19 planet 41:16, 17 47:15, 20 69:7 119:1 137:17 138:20 191:9 209:1, 16 255:15 279:3 282:17 planned 11:4 12:5 123:20 212:7 270:22 planner 159:10 planning 103:15 127:17 143:4, 9 159:11 180:19 plans 12:4 25:10 104:2 175:2 plant 208:10
179:6 257:8 260:19 planet 41:16, 17 47:15, 20 69:7 119:1 137:17 138:20 191:9 209:1, 16 255:15 279:3 282:17 planned 11:4 12:5 123:20 212:7 270:22 planner 159:10 planning 103:15 127:17 143:4, 9 159:11 180:19 plans 12:4 25:10 104:2 175:2 plant 208:10 planting 168:14
179:6 257:8 260:19 planet 41:16, 17 47:15, 20 69:7 119:1 137:17 138:20 191:9 209:1, 16 255:15 279:3 282:17 planned 11:4 12:5 123:20 212:7 270:22 planner 159:10 planning 103:15 127:17 143:4, 9 159:11 180:19 plans 12:4 25:10 104:2 175:2 plant 208:10 planting 168:14 plants 41:20
179:6 257:8 260:19 planet 41:16, 17 47:15, 20 69:7 119:1 137:17 138:20 191:9 209:1, 16 255:15 279:3 282:17 planned 11:4 12:5 123:20 212:7 270:22 planner 159:10 planning 103:15 127:17 143:4, 9 159:11 180:19 plans 12:4 25:10 104:2 175:2 plant 208:10 planting 168:14 plants 41:20 45:11 229:15
179:6 257:8 260:19 planet 41:16, 17 47:15, 20 69:7 119:1 137:17 138:20 191:9 209:1, 16 255:15 279:3 282:17 planned 11:4 12:5 123:20 212:7 270:22 planner 159:10 planning 103:15 127:17 143:4, 9 159:11 180:19 plans 12:4 25:10 104:2 175:2 plant 208:10 planting 168:14 plants 41:20
179:6 257:8 260:19 planet 41:16, 17 47:15, 20 69:7 119:1 137:17 138:20 191:9 209:1, 16 255:15 279:3 282:17 planned 11:4 12:5 123:20 212:7 270:22 planner 159:10 planning 103:15 127:17 143:4, 9 159:11 180:19 plans 12:4 25:10 104:2 175:2 plant 208:10 planting 168:14 plants 41:20 45:11 229:15 233:18 platforms 271:1
179:6 257:8 260:19 planet 41:16, 17 47:15, 20 69:7 119:1 137:17 138:20 191:9 209:1, 16 255:15 279:3 282:17 planned 11:4 12:5 123:20 212:7 270:22 planner 159:10 planning 103:15 127:17 143:4, 9 159:11 180:19 plans 12:4 25:10 104:2 175:2 plant 208:10 planting 168:14 plants 41:20 45:11 229:15 233:18 platforms 271:1 play 61:14 127:2
179:6 257:8 260:19 planet 41:16, 17 47:15, 20 69:7 119:1 137:17 138:20 191:9 209:1, 16 255:15 279:3 282:17 planned 11:4 12:5 123:20 212:7 270:22 planner 159:10 planning 103:15 127:17 143:4, 9 159:11 180:19 plans 12:4 25:10 104:2 175:2 plant 208:10 planting 168:14 plants 41:20 45:11 229:15 233:18 platforms 271:1 play 61:14 127:2
179:6 257:8 260:19 planet 41:16, 17 47:15, 20 69:7 119:1 137:17 138:20 191:9 209:1, 16 255:15 279:3 282:17 planned 11:4 12:5 123:20 212:7 270:22 planner 159:10 planning 103:15 127:17 143:4, 9 159:11 180:19 plans 12:4 25:10 104:2 175:2 plant 208:10 planting 168:14 plants 41:20 45:11 229:15 233:18 platforms 271:1 play 61:14 127:2 190:1 195:11
179:6 257:8 260:19 planet 41:16, 17 47:15, 20 69:7 119:1 137:17 138:20 191:9 209:1, 16 255:15 279:3 282:17 planned 11:4 12:5 123:20 212:7 270:22 planner 159:10 planning 103:15 127:17 143:4, 9 159:11 180:19 plans 12:4 25:10 104:2 175:2 plant 208:10 planting 168:14 plants 41:20 45:11 229:15 233:18 platforms 271:1 play 61:14 127:2 190:1 195:11 200:14, 18 213:15
179:6 257:8 260:19 planet 41:16, 17 47:15, 20 69:7 119:1 137:17 138:20 191:9 209:1, 16 255:15 279:3 282:17 planned 11:4 12:5 123:20 212:7 270:22 planner 159:10 planning 103:15 127:17 143:4, 9 159:11 180:19 plans 12:4 25:10 104:2 175:2 plant 208:10 planting 168:14 plants 41:20 45:11 229:15 233:18 platforms 271:1 play 61:14 127:2 190:1 195:11

plays 84:21 **plea** 199:9 **plead** 229:22 Please 14:17 15:2, 19, 22 16:10, 14 17:7, 20 19:16 22:15 27:3 29:13, 17 31:11, 19 33:20 36:9, 11 37:12, 15 38:7 40:22 44:9 48:14 52:6 53:8 54:13 58:15, 18, 21 59:8 60:12 65:2 68:19 72:1, 8 76:6, 9, 12 77:4 80:20 87:4 90:14 93:9 94:8 97:8 98:3 102:9, 12, 15, 17 106:12 110:5 113:1 115:13 118:10 122:6 125:3 128:14, 17, 20 129:15 135:17, 20 136:1, 12, 16 139:22 142:22 146:7 149:9 151:5 152:5 155:15 159:6 161:5 164:9, *12, 15, 19* 167:*16* 177:9 179:13 182:17 183:18, 21 184:3, 8, 16 186:5 187:14 188:6 192:21 198:15 199:9 200:4 201:5, 9 205:16, 19, 22 209:10 211:18 214:13 216:22 220:9 221:2 223:13, 18 227:10 232:4, 7, 10, 18 236:3, 22 237:6 240:13, 19 241:3 243:5 247:22 248:3, 6, 15 249:21 252:9 255:1 257:19 263:5 269:19 272:10 273:19 277:3 279:22 283:17, 21 286:9, 11 287:19 289:2 291:13 pledged 74:8 plenty 234:20 plots 229:7 plug 20:17 **plug-in** 39:8, 14, 17 55:16 70:15 123:5 223:1 plug-ins 40:2

PM 158:11 180:7 259:9, 13 **pneumonia** 100:*13* pocketbook 68:6 poet 227:21 **point** 52:17 107:3 185:*15* 186:*1* 197:18 211:6 242:15 261:13 **pointed** 81:16 225:5 **points** 48:19 polar 79:17 **policies** 9:21 31:2 61:8 88:5, 9, 15 127:9, 19 157:16 262:4 **policy** 18:10 81:14 87:7 103:10, 22 120:9, 20 140:5 170:21 174:1, 5 176:17, 19 191:20 193:7 238:8 263:8 policymakers 127:4 political 46:4 82:21 165:1 240:14 politician 46:22 **poll** 31:*1* **polling** 174:*1* polls 34:6 174:6 **pollutant** 116:21 131:10 158:3, 13 218:4 251:17 pollutants 18:19 34:10 42:9 108:2 158:15 162:4 165:16 210:14 212:19 214:8 239:18 **pollute** 28:4 201:3 253:21 polluted 18:7 34:20 99:4 108:3 111:*1* 113:20 180:*11* 191:*17* 197:2 199:12 **pollutes** 98:18 polluting 21:13 45:11 99:3 105:4 111:8 **pollution** 17:5, 14 18:9 19:12 20:15 26:2 27:15 30:21 31:8 32:16, 20 33:1, 15 34:13 36:2, 3, 4, 7, 10, 19 39:22 42:18 61:15 69:9, 12, 18 74:3

79:10 82:12 90:3

95:12, 15, 19 96:3,

5, 9, 14, 18 97:3, 6, 10, 22 98:14 99:11, 15 109:15 110:22 111:8, *16*, *21* 112:*1*, 10, 15 113:11, 21 114:2, *8*, *21* 116:*1* 144:1, 6 145:11, 18 149:18 150:13, 20, 22 151:17, 18 152:1, 21 154:8, 12 155:2 156:6 162:*1* 163:5, 16 174:2, 17, 20 176:11 180:4 181:3 186:2 187:20 188:1, 3 189:*11* 190:*5*, *7*, *11* 194:9, 16 195:13, 14 196:19 197:19 198:8, 19, 22 199:7 200:10, 20 201:1 208:4 210:8, 11 212:15 213:1, 12, *16* 215:*1*, 21 216:5 217:12 218:13 219:1, 3, 13 223:9 228:4 229:1, 17, 18 231:7 241:13 244:1, 8, 12, 13 245:1, 2 246:1 252:21 256:19 258:8, 15 259:6, 7, 14 262:4 267:17 268:17 275:5, 7, 11, *13* 281:3, 4, *15* 284:14 285:2 pollution-free 154:4 pollution-induced 210:10 211:3 **pollutions** 121:*14* ponds 229:10 **pool** 200:18 Poor 3:20 98:10 162:10 198:7 207:14 267:5, 7, 20 268:22 popular 29:2 86:2 147:6, 8 234:8 population 100:20 165:14 populations 213:12 porch 213:4 port 38:19 **portion** 67:12 186:2 264:22 Portland 91:10, 11, 22 202:3 Portlanders 92:8 Portland's 92:4 **posed** 36:17 poses 206:21

position 11:*1* 64:*1* 125:17 127:17 165:11 176:16 positioned 148:20 208:4 positive 35:19 68:9 207:20 possibility 33:10 186:19 possible 17:15 20:14 26:8 27:19 32:21 33:15 43:22 52:2, 17 60:8 67:6 83:19 93:5 94:14 97:7, 16 98:12 100:6 101:17 105:12 108:21 112:12 144:5 145:16 146:2 151:20 152:20 154:16 156:19 157:8 158:16 160:14, 17 162:19 163:8 165:21 167:5, 9 170:19 188:6 190:8 192:13, 14 193:15 194:14 195:14 199:10 207:1 209:5 211:10 212:13, 14 214:5 216:9 221:12 223:14 226:16 230:1 231:5 235:13 241:12 246:4, 5 254:3 255:12 257:13 260:16 261:6, 20 262:7, 15 267:9 269:1, 11 271:15 276:3 284:17 285:19 **possibly** 180:*13* **post** 13:17 71:15 post-2017 264:20 potent 282:14 potential 124:12 261:3 265:3 potentially 107:21 177:18 **poured** 45:4 poverty 268:4, 12 269:2 Power 3:11 4:9 39:20 41:20 45:11 50:14 52:10 80:22 83:2 108:4 118:14, 18 125:20 151:5 175:2 176:*1* 203:10 233:18

236:16 255:9 **powered** 39:12 **powerful** 202:16 219:7 271:12 **PPC** 174:16 **ppm** 78:14 practical 123:18 153:21 154:16 practice 104:2 274:5 practitioner 286:18 pragmatic 126:18 178:21 **praise** 81:11 pray 53:19, 22 54:9 **Prayer** 48:4, 5 **prayers** 48:10 **preamble** 64:*13* precious 177:22 199:15 229:7 precipitation 259:22 precursors 42:9 predecessor 86:4 prediction 81:18 predispose 35:14 predominant 62:2 predominantly 142:7 149:16 150:16 208:11 preference 61:13 preferred 17:12 140:10 pregnant 256:16 premature 219:4 **prepare** 41:*13* 127:5 prescribed 215:9 **present** 13:*12* 173:20 186:4 195:1 271:21 presentation 14:8 presentations 13:1 presented 154:19 215:7 presents 218:2 preserved 117:11 preserves 117:16 **President** 9:10, 19 27:14, 20 30:6 38:13 41:3 42:20 46:13, 20 48:9 51:18 71:1, 10 81:8 82:20 112:7 129:18 148:10 168:2 201:5 206:17 216:7 218:10 221:19

252:19 254:4

257:11 261:9
284:12, 18
presiding 8:20
13:21
press 15:1
pressing 94:2
Pressure 28:22
29:1 47:21 172:14 271:12
preterm 275:14
pretty 203:10
prevent 160:8
190:3 219:4, 10
274:8 287:3
preventable 196: <i>19</i>
preventing 225:1
prevention 244:13
287: <i>1</i>
previous 10:5
30:12 51:9 65:16 152:17 156:14 185:12 191:5,14
185:12 191:5, 14
217:6 224:6, 9
245:13 261:12
286:4
previously 142:1
price 75:5 265:17
279:21 280:2
prices 21:9 171:6
178:8, 15 186:17 primarily 40:8
primary 62:9
64:6 129:20 267:4
274:4
prime 145:21
Principal 196: <i>12</i>
199:13
principles 57:10
173: <i>18</i> print 285: <i>11</i>
print 283.11 prior 14:6 15:12
37:5 58:6 75:19
101:22 128:5
135:8 163:22
183: <i>12</i> 205: <i>7</i> 231: <i>17</i> 247: <i>14</i>
231:17 247:14
priorities 84:16
261:15
prioritize 10:3
prioritizing 84: <i>12</i> 260: <i>21</i> 263: <i>18</i>
priority 99:9
116: <i>12</i> 146: <i>14</i>
152:18 174:19
185:1 246:2
Pritzker 261:1
Prius 77:22 169:2
222:12, 14
private 19:20
22:21 38:11 59:15 90:18 103:6
90.10 103.0

126.20 142.6
136:20 143:6
159:9 165:2
209:17 224:3
233:9 241:8 252: <i>14</i> 267:2
252:14 267:2
278:14
privileged 21:12
194:9
proactively 89:17
probability-based
174: <i>12</i>
probably 25:1
109:6, 11 194:6
234:7 274:22
problem 92:9
problem 92:9 171:11 198:11 200:13 201:2
200:13 201:2
226:7 230:20
233:16
problems 35:12
100: <i>17</i> 108:2
112:5 113:11
114:11, 22 171:4
195:8 198:9 215:8
Procedure 65:19
proceed 247:5
248: <i>11</i> , <i>13</i> , <i>19</i>
proceedings 251:20 proceedings 16:11
proceedings 16:11
136: <i>13</i> process 13: <i>3</i>
46:11 99:10
103: <i>13</i> 109:2 <i>1</i>
139:3 241: <i>14</i>
250:6
processes 180:19
pro-competitive
66:15
produce 54:18
64:6 85:20 86:7
160:5 194:20
226:15 264:13
281:2
produced 233:21
producers 79:19
85:17 129:20
produces 166:5
producing 95:3
233:20
product 66:13
138: <i>1</i>
production 23:1
production 23: <i>1</i> 57:2 60:7 77:22 78: <i>4</i> 80: <i>1</i> 123:9
78:4 80: <i>1</i> 123:9
130:16 147:14
256:7
products 64:6
271: <i>14</i>
professional
136:2 <i>1</i> 161: <i>14</i>

291:12
professionals 116:4
professor 255:6
profit 237:6
271:13
profitable 207: <i>13</i> profits 47: <i>21</i> 93: <i>6</i>
207:20
profound 269: <i>3</i>
Program 8: <i>15</i>
11:2, 7 49:14, 18
55:4 57:5 65:22 66:4 68:11 98:9
117:10 124:10
126:11, 12 144:16
148:9 156: <i>13</i>
173:2 <i>1</i> 174: <i>4</i>
186: <i>18</i> 217: <i>21</i> 228:2 250: <i>18</i>
programs 16:19
57:9 61:8 251:6
progress 10:11
29:20 105: <i>18</i> 117:2 145: <i>3</i> , <i>6</i>
117:2 145:3, 6 165:8 199:6
245: <i>14</i> 261: <i>5</i>
271:16
progression 257:4
progressively 118:3
Project 2:18 11:8 41:3 212:9 253:9,
10, 11
projected 210: <i>19</i>
265: <i>1</i>
projection 71:7
104: <i>13</i> projects 16: <i>19</i>
18: <i>16</i> 28: <i>17</i>
187:18
prolonged 258:16,
21
promise 44: <i>19</i> 99: <i>16</i> 206: <i>19</i>
promised 51:16
112:7 216:7
promises 46:18
104:20 105:5, 8 206:18 240:6
206:18 240:0 promote 58:16
59:6 76:7 80:18
102:10 128:15
135:18 164:10
168:20 169:18
173: <i>10</i> 184:9 193: <i>12</i> 196: <i>4</i> , <i>7</i>
205:17 232:5
248:1 270:1 272:4
273:17, 18 287:15
288: <i>3</i> 289: <i>16</i> 290: <i>4</i> , <i>17</i>
290:4, 1/

promoted 15:12
promoted 15: <i>1</i> 2 37: <i>5</i> 58: <i>6</i> 75: <i>1</i> 9
37.3 36.0 73.19
101:22 128:5
101:22 128:5 135:7 163:22
182:20 183:2, 11
102.20 103.2, 11
184: <i>15</i> 205: <i>7</i> 231: <i>17</i> 235:2 <i>1</i>
231:17 235:21
247:14
promoting 9:22
168:18 207:17
232:17 270:4
277: <i>1</i>
promptly 217:15
promulgated
156:14, 20
nronane 179.4
propule 175.7
property 53:11
proponents 174:10
proposal 16:22
26:5 27:17 31:11
40:9 48:22 49:15
50:4 62:16 69:21
70:6, 10 71:7, 14
74:13 82:15 83:13
04.12 110.15
94:13 110:13
112: <i>16</i> 113: <i>15</i>
115.7 116.9
117.21 121.20
94:13 110:15 112:16 113:15 115:7 116:9 117:21 131:20 140:21 142:13
140:2 <i>1</i> 142: <i>13</i>
145:10 147:20
148:8 149:20
153: <i>1</i> 156: <i>1</i> 2
174:9 175:2, 8, 16
1/4.9 1/3.2, 0, 10
190:12 193:17
195:19 201:19
215.20 217.5 20
215:20 217:5, 20
225:6 239:10 242:18 247:11
242.18 247.11
252.22 254.7
253:22 254:7 264:4 273:14
264:4 273:14
284:15 286:3
204.13 200.3
proposals 30:11
40:12 147:14
174:6, 8 264:10
proposal's 117:2
propose 192:12
Proposed 8:14 9:7
110posed 6.14 9.7
10:15, 18 11:5, 12,
21 12:6 19:20
21:10, 18 43:22
21.10, 10 45.22
49:2, 4 50:6 63:22
74:14, 20 77:14
82:16 86:21
103:20 104:5
107:14 122:15
130:1 134:19
140:7 141:8 145:4
147:13, 16 152:19
154:19 156:2
157.0 150.2 165.7
137.9 138.2 103.7
157:9 158:2 165:7 172: <i>15</i> 202: <i>17</i>

204:20 221:20 237:1 238:15, 22 239:19 243:10, 16 250:13 263:20 264:7, 18 265:3 274:3 276:12 proposing 50:21 propulsion 126:6 **protect** 9:12, 15 28:10 30:1 69:10 90:6 97:21 115:8 137:17 145:17, 22 154:8 158:9 194:21 196:17, 21 197:20 199:8, 10, 20 203:13 207:22 209:15 246:5 262:2 279:1 **protected** 204:*15* protecting 33:1 81:5 96:8 98:13 107:4 144:19 147:3 181:12 194:22 231:6 277:18 279:13 **PROTECTION** 1:2 2:1 7:4 8:3, 12 10:1 12:9 115:18 116:6 134:3 163:11 181:11 202:20 204:5 243:21 286:8 protections 29:7 204:14 276:11 protective 30:10 117:14 202:22 217:16 218:7 **protects** 117:*16* **proud** 94:22 95:5 106:17 146:15 238:9 **prouder** 105:*1* **prove** 19:3 **proven** 50:12 244:10 245:2 **provide** 13:8 16:6 29:10 30:18 51:22 55:6 61:19 63:10 117:2 118:6 119:19 124:8, 11, 20 126:1 131:5, 22 136:8 147:19 174:7 183:7 223:5 243:16 250:5, 8, 12 265:20 269:21 272:4 289:17 290:5, 18 provided 63:7 69:14 174:13

207.14 200.2 20
287: <i>14</i> 288:2, <i>20</i> 289: <i>13</i> 290: <i>1</i> , <i>14</i>
provider 286:22
providers 56:6
provides 12:22
39:19 251:10
providing 31:21
providing 31:2 <i>1</i> 125: <i>11</i> , <i>13</i> 168: <i>18</i>
263:9
provisions 57:1
140:21
proximity 213:21
psychological 35:18
psychology 35:7 PTSD 35:9
PUBLIC 1:4 8:4,
14, 17 9:12, 16
10.1 22 11.13
12:18 13:5, 9 15:8
16:2 18: <i>10</i> 19: <i>5</i> , <i>6</i>
16:2 18:10 19:5, 6 36:18 41:7 44:6 64:3 68:8 69:10
64:3 68:8 69:10
77:7 94:20 98:22
109:21 114:13
116:6 117:18
120:4 121:1 134:4,
9 136:4 139:10
145:22 155:19 158:9, 16 159:19
156.9, 10 159.19 163:11 172:3
173.21 174.1 4 5
163:11 172:3 173:21 174:1, 4, 5 176:13, 21 180:19 185:9 193:7
185:9 193:7
202: <i>17</i> 204: <i>14</i>
219:9 234:2 <i>1</i>
243:18, 21 245:6
246:5 247:9 255:8
258:8 259:7, 9
261:11, 16 273:12
277:12 278:2, 8
279:16 285:22
291:16, 18
public_hearing@abt
assoc.com 15:20 37:13, 16 58:19, 22 76:10, 13 102:13,
76:10, 13 102:13.
16 128:18, 21
135:21 136:2
164:13, 16 183:19,
22 205:20 220:17
232:8, 11 248:4, 7
269:20 272:11
287:20 289:3
public_hearing@abt
assoc.con 206:1
public_hearing@abt associ.com 16:1
184:4
public's 157:3
174:2
pulled 46:9

pump 70:10 98:19 145:19 154:9
160:2 169: <i>14</i> 231:8
purchase 20: <i>17</i> 28: <i>12</i> 60: <i>3</i> 186: <i>7</i>
purchased 43:6 75:6
purchasing 23:9, 10 purifiers 34:15
purple 45:14 189:10
purpose 9:5 74:19 134:17 243:13
purposes 278:8 pursue 149:4
pursuit 44: <i>17</i> 48:2 push 109: <i>7</i> 270:9 pushing 108: <i>7</i>
109:2 265:11 put 17:8 24:21
25:20 46:17 47:19 51:17 56:14 57:14
70:8 74:9 75:4 80:12 88:18 89:14
97: <i>11</i> 119: <i>11</i> 154:20 156: <i>12</i>
215:5 216:9 218:8, 11 222:3 226:12
260:19 puts 36:12 64:14
114:8 148:9 269: <i>12</i> Putting 51: <i>12</i>
95:11 112:14 140:8 151:22
190:10 194:15 287:21
puzzle 282:10
< Q > QIUNTA 4:18
139:2 <i>1</i> 140: <i>4</i> qualified 191:2 <i>0</i>
qualitative 143:11 Quality 2:5 5:5,
10 8:20 9:2 18:13
29:7 34:9 36:6, 20 42:7 45:2, 13 61:9
72:21 87:11 92:4
100: <i>18</i> , <i>21</i> 111: <i>13</i> , <i>18</i> 112: <i>3</i> , <i>18</i>
113:14 114:10 116:4 117:4, 5 131:18 148:18
131:18 148:18
153: <i>16</i> 155: <i>19</i> , <i>21</i> 162: <i>11</i> 165: <i>19</i>
169: <i>15</i> 171: <i>4</i>
189: <i>9</i> , <i>12</i> , <i>17</i> 195: <i>5</i> 197: <i>1</i> 198: <i>7</i>
202:11 214:22

```
267:7, 18, 20 281:2,
5 286:20, 21
quantitative 143:11
guarter 67:5
246:14
question 61:16
63:5 101:4
questioned 180:7
questions 14:9
15:2 21:7 26:11
58:2 149:6
quick 25:3 183:9
258:19
quickly 11:2 24:3
31:11 36:7 51:8
120:10 156:17
212:13 214:5
225:21 254:7
257:12 276:3
282:5
quiet 222:15
quite 74:6 269:6
quote 63:21
quotes 18:17
< R >
Race 78:17, 19
219:10
racial 96:1 150:20
185:3 216:5
racism 208:16
Radiation 2:3 8:13
Rafe 87:3, 6
raging 153:13
rail 197:12
railroad 203:8
railroads 203:11
railyard 271:6
rain 82:2 200:15,
16 213:5 235:7
rained 200:17
rainfall 82:1
Rainier 188:16
raining 104:6
rains 200:18
285:16
raise 22:7, 8
26:19 37:21 38:1
58:15, 17 59:5
72:1 76:6, 8, 20
78:8 93:16 94:1
102:9, 11 114:12
121:21, 22 128:14,
16 129:4, 10
132:12 135:17, 19
139:16 155:10
164:9, 11 172:22
173:1, 7 176:14
```

215:2 223:11

241:22 244:5

245:8, 14 258:5, 11

177:5 182:*1*, 8 184:8, 11 187:6 196:4 205:16, 18 216:16, 17 219:19 220:2 227:3, 4 232:4, 6 234:5, 17 235:12 247:22 248:2 249:1, 8, 16 252:3, 4 254:17, 18 262:21 266:16 270:1 272:3 273:16 276:21 287:10, 11, 15 288:20 289:1, 13, 16 290:1, 4, 14, 17 raised 14:10 80:17 94:2 173:9 177:*3* 182:*14* 184:*13* 196:6 229:13 266:18 270:3 273:18 276:22 289:5 290:8, 20 raising 234:20 235:10 291:4 Raleigh 167:22 RAMBO-JONES 4:2 102:17 103:2, 4, 5 **ramping** 240:5 ran 197:3 range 23:7 24:1, 2, 14 25:6, 9 39:10 64:7 126:7, 13 147:20 ranked 92:4 110:21, 22 ranks 94:19 95:18 rapid 89:10 257:2 **rapidly** 83:17 104:9 162:15 168:8 242:9 rapidly-intensifying 255:21 rate 34:8 50:15 153:*14* 242:*3* 245:9 **rated** 34:5 rates 32:16 96:1 144:1 150:20 154:13 162:3 163:5 181:9 208:5 216:6 242:4 269:6 **rating** 34:5 **ratio** 68:9 **RAYF** 3:14 razor's 106:6 **reach** 119:*11* 185:15 213:5 218:8 220:16

239:7 265:17 reached 208:14 reaches 130:18 **reaching** 146:21 react 202:16 **reaction** 170:21 197:3 read 191:3 235:2 ready 8:9 59:8 65:2 80:19 126:15 130:18 132:17 134:9 184:16 196:7 206:5 207:5 211:18 220:9 221:1 232:18 236:3 237:2, 3 238:2 241:3 248:11, 12 255:1 266:19 270:5 273:19 277:2 279:22 reaffirms 123:14 real 22:19 147:19 261:3 realistic 79:1 126:*1* **reality** 11:*17* 33:10 99:4 101:2 122:17 185:10 186:16 218:17 256:4 realize 170:16 280:22 realized 122:22 156:19 158:21 realizes 244:12 realizing 42:13 251:13 really 75:14 78:1 80:7 105:9 138:3 180:22 186:18 192:1 200:11, 14, 15 219:8 228:19 230:17 231:3 234:12, 13 276:9, 13 281:6, 8 282:17, 18, 21 283:15 284:5, 8, 17, 21 285:5, 18 286:7, 17 realm 278:6 real-world 29:19 138:15 286:10 reanchor 173:17 **reaped** 105:14 reason 12:3 72:17 77:19 178:7 192:2 212:12 231:12 reasonable 11:9 14:*1*

reasonably 217:18

102.14
reasons 103:14
144:3, 12 185:19
201:19 228:17
reassure 43:3
rebuild 88:15
178:18
recall 42:11
recapturing 70:1
receive 9:5 15:11
37:4 58:5 75:18
101:2 <i>1</i> 128:4
134: <i>18</i> 135: <i>6</i>
163:21 183:10
205:6 231:16
247:13
received 34:9
receives 82:2
receiving 49:16
184: <i>15</i> 271: <i>7</i>
recently-released
188:9
recess 132:17
246:11, 15 247:3
recessed 133:8
recession 89:9
recognition 57:3
158:2 171:7
recognize 14:13
62:16, 18 118:20
195:6 261: <i>18</i>
264: <i>1</i>
recognized 68:1
194: <i>18</i> 198: <i>11</i>
218: <i>1</i>
recognizes 147:20
204:17 288:6
recognizing 61:11
recommend 49:12,
19 50:9 123:22
157:10, 18 199:14
240:9
recommended
35:17
recommends 264:9
reconvene 246:12,
18
reconvening 133:3
record 10:9, 13
13:22 14:4 16:11, 15 19:13, 17 22:16
15 19:13, 17 22:16
27:4 31:20 33:21
38:8 41:1 44:10
48:15 52:7 54:14
59:9 60:13 65:3
68:20 72:9 77:5
80:20 84:3 87:5
90:15 91:13 92:2
94:9 98:4 102:19
106:13 108:15
110:6 113:2
115: <i>14</i> 118: <i>11</i>

121:2 122:7 125:4
129:16 136:13, 17
140: <i>1</i> 143: <i>1</i> 146:8
149:10 152:6
155: <i>16</i> 159: <i>7</i>
161:6 164:20 167: <i>17</i> 170:6
177:10 178:3
179: <i>14</i> 182: <i>18</i>
167:17 170:6 177:10 178:3 179:14 182:18 184:17 187:15 190:21 192:22
190.21 192.22 195:18 196:8
200:5 201:10
206:6 209:11
211:19 214:14
217: <i>1</i> 220: <i>10</i> 221: <i>3</i> 223: <i>19</i>
224:10 227:11
232:19 236:4
238:3 241:4 243:6
249:22 252:10 255:2 257:20 260:7 261:14 263:6 266:20
260:7 261: <i>14</i>
263:6 266:20
270:6 273:20
277:3 280:1
283:22 recorded 13: <i>14</i>
recording 13:17
records 188:18
recover 120:14
recovers 140:10 recreational 271:2
rectify 116:12
recycle 85:20
100yele 05.20
120:13
120: <i>13</i> recycled 120: <i>18</i>
120:13 recycled 120:18 recycling 85:19
120:13 recycled 120:18 recycling 85:19 281:13, 16 Red 42:4 45:13
120:13 recycled 120:18 recycling 85:19 281:13, 16 Red 42:4 45:13 60:6 92:15 189:10
120:13 recycled 120:18 recycling 85:19 281:13, 16 Red 42:4 45:13 60:6 92:15 189:10 197:12 262:13
120:13 recycled 120:18 recycling 85:19 281:13, 16 Red 42:4 45:13 60:6 92:15 189:10 197:12 262:13 redesignate 234:16 redlining 256:20
120:13 recycled 120:18 recycling 85:19 281:13, 16 Red 42:4 45:13 60:6 92:15 189:10 197:12 262:13 redesignate 234:16 redlining 256:20
120:13 recycled 120:18 recycling 85:19 281:13, 16 Red 42:4 45:13 60:6 92:15 189:10 197:12 262:13 redesignate 234:16 redlining 256:20
120:13 recycled 120:18 recycling 85:19 281:13, 16 Red 42:4 45:13 60:6 92:15 189:10 197:12 262:13 redesignate 234:16 redlining 256:20 redox 281:22 reduce 9:17 20:15 25:20 29:21 30:20
120:13 recycled 120:18 recycling 85:19 281:13, 16 Red 42:4 45:13 60:6 92:15 189:10 197:12 262:13 redesignate 234:16 redlining 256:20 redox 281:22 reduce 9:17 20:15 25:20 29:21 30:20 31:7, 9 35:18
120:13 recycled 120:18 recycling 85:19 281:13, 16 Red 42:4 45:13 60:6 92:15 189:10 197:12 262:13 redesignate 234:16 redlining 256:20 redox 281:22 reduce 9:17 20:15 25:20 29:21 30:20 31:7, 9 35:18 47:21 55:14 61:8,
120:13 recycled 120:18 recycling 85:19 281:13, 16 Red 42:4 45:13 60:6 92:15 189:10 197:12 262:13 redesignate 234:16 redlining 256:20 redox 281:22 reduce 9:17 20:15 25:20 29:21 30:20 31:7, 9 35:18 47:21 55:14 61:8, 15 73:20 74:9 88:8 97:3 109:8
120:13 recycled 120:18 recycling 85:19 281:13, 16 Red 42:4 45:13 60:6 92:15 189:10 197:12 262:13 redesignate 234:16 redlining 256:20 redox 281:22 reduce 9:17 20:15 25:20 29:21 30:20 31:7, 9 35:18 47:21 55:14 61:8, 15 73:20 74:9 88:8 97:3 109:8 116:17, 20 121:13
120:13 recycled 120:18 recycling 85:19 281:13, 16 Red 42:4 45:13 60:6 92:15 189:10 197:12 262:13 redesignate 234:16 redlining 256:20 redox 281:22 reduce 9:17 20:15 25:20 29:21 30:20 31:7, 9 35:18 47:21 55:14 61:8, 15 73:20 74:9 88:8 97:3 109:8 116:17, 20 121:13 153:4 158:16
120:13 recycled 120:18 recycling 85:19 281:13, 16 Red 42:4 45:13 60:6 92:15 189:10 197:12 262:13 redesignate 234:16 redlining 256:20 redox 281:22 reduce 9:17 20:15 25:20 29:21 30:20 31:7, 9 35:18 47:21 55:14 61:8, 15 73:20 74:9 88:8 97:3 109:8 116:17, 20 121:13 153:4 158:16 160:4 169:17
120:13 recycled 120:18 recycling 85:19 281:13, 16 Red 42:4 45:13 60:6 92:15 189:10 197:12 262:13 redesignate 234:16 redlining 256:20 redox 281:22 reduce 9:17 20:15 25:20 29:21 30:20 31:7, 9 35:18 47:21 55:14 61:8, 15 73:20 74:9 88:8 97:3 109:8 116:17, 20 121:13 153:4 158:16 160:4 169:17
120:13 recycled 120:18 recycling 85:19 281:13, 16 Red 42:4 45:13 60:6 92:15 189:10 197:12 262:13 redesignate 234:16 redlining 256:20 redox 281:22 reduce 9:17 20:15 25:20 29:21 30:20 31:7, 9 35:18 47:21 55:14 61:8, 15 73:20 74:9 88:8 97:3 109:8 116:17, 20 121:13 153:4 158:16 160:4 169:17
120:13 recycled 120:18 recycling 85:19 281:13, 16 Red 42:4 45:13 60:6 92:15 189:10 197:12 262:13 redesignate 234:16 redlining 256:20 redox 281:22 reduce 9:17 20:15 25:20 29:21 30:20 31:7, 9 35:18 47:21 55:14 61:8, 15 73:20 74:9 88:8 97:3 109:8 116:17, 20 121:13 153:4 158:16 160:4 169:17 174:17, 20 176:11 190:4 219:2 222:3 226:14 239:13 258:20 261:9
120:13 recycled 120:18 recycling 85:19 281:13, 16 Red 42:4 45:13 60:6 92:15 189:10 197:12 262:13 redesignate 234:16 redlining 256:20 redox 281:22 reduce 9:17 20:15 25:20 29:21 30:20 31:7, 9 35:18 47:21 55:14 61:8, 15 73:20 74:9 88:8 97:3 109:8 116:17, 20 121:13 153:4 158:16 160:4 169:17

reduced 20:2
62:2 <i>1</i> 75:5 105: <i>14</i> 120:4, 5 130:7 reduces 83:7
120:4, 5 130:/
reduces 85:/
130:14
reducing 10:2 33:14 36:2, 4 47:5
55:14 50:2, 4 47:5 57:12 64:3 111:7
57:12 64:3 111:7
125: <i>19</i> 137: <i>18</i> 138: <i>5</i> 144:2 <i>1</i>
146:16, 22 147:21
156: <i>15</i> 160: <i>12</i>
167: <i>1</i> 181:2, <i>3</i>
190.0 212.10 242.15 246.1
190:6 212:18 243:15 246:1 270:11 271:17
reduction 17:14
36: <i>11</i> 39: <i>21</i> 85: <i>5</i>
90:3 95:12 97:10
103:22 109:4
112:15 141:2, 5
142:17 144:16
145:11 152:1
190:11 194:16
250:16 263:19
265:6
reductions 11:3, 11 12:1 17:2 29:16
49:11 51:16 52:2
69:15, 18 70:1, 9
71:15 82:19 83:17
85:7 88:18 90:6
117:17 119:20
122:15 132:4
138:15 139:7
145:3 154:22
156·19 157·13
158:8 217:18, 19
218:3 239:10
218: <i>3</i> 239: <i>10</i> 241: <i>15</i> 245: <i>21</i>
250:12, 14, 19
259:18 286:10
redundant 53:3
REEM 3:14 87:3,
6
Rees 5:10
refineries 185:5
186:2 <i>1</i>
reflect 48:22 262:5
reform 234:4
refreshed 238:17
refrigerant 147:22
refueling 56:5, 8
refusal 49:8
regard 61:13
120:16 242:19
regarding 9:6
52: <i>13</i> 124: <i>20</i>
134: <i>19</i> regardless 185: <i>3</i>
275:20
_, _, _,

regenerative 24:22 271: <i>3</i>
regiment 271:19
Region 143:7, 19
156:6 162:8
258:12
750.12
regional 153:10
regions 239:18
Dociotan 10.21
Register 10:21
13:12 269:18
272.0 276.20
212.9 210.20
287:9 288:22
13:12 269:18 272:9 276:20 287:9 288:22 289:15 290:3, 16
207.13 270.3, 10
registered 13:3
14:18 15:21 19:5
14.10 13.21 17.3
37:14 58:20 76:11
102:14 128:19
105.00 164.14
135:22 164: <i>14</i>
174: <i>14</i> 183: <i>20</i>
194.2 205.21
184:2 205:2 <i>1</i>
232:9 248:5 272:2
297.13 22 299.1 6
207.13, 22 200.1, 0,
232:9 248:5 272:2 287:13, 22 288:1, 6, 12, 18, 19 289:7, 11, 12, 21, 22 290:12,
12 21 22 200.12
12, 21, 22 290.12,
13
registering 18:22
1 cgistering 10.22
registers 288:12
registration 13:3
regular 43:16
regulated 202:21
271: <i>11</i>
2/1.11
regulating 56:3
regulation 35:12
regulating 56:3 regulation 35:12
regulation 35:12 66:10 171:2, 14
regulating 56:3 regulation 35:12 66:10 171:2, 14 196:21 204:11
66: <i>10</i> 171:2, <i>14</i> 196: <i>21</i> 204: <i>11</i>
66: <i>10</i> 171:2, <i>14</i> 196:2 <i>1</i> 204: <i>11</i> 209:5
66: <i>10</i> 171:2, <i>14</i> 196:2 <i>1</i> 204: <i>11</i> 209:5
66:10 171:2, 14 196:21 204:11 209:5 regulations 9:21
66:10 171:2, 14 196:21 204:11 209:5 regulations 9:21 12:5 36:12, 21
66:10 171:2, 14 196:21 204:11 209:5 regulations 9:21 12:5 36:12, 21 45:20 57:12
66:10 171:2, 14 196:21 204:11 209:5 regulations 9:21 12:5 36:12, 21 45:20 57:12
66:10 171:2, 14 196:21 204:11 209:5 regulations 9:21 12:5 36:12, 21 45:20 57:12
66:10 171:2, 14 196:21 204:11 209:5 regulations 9:21 12:5 36:12, 21 45:20 57:12 104:21 107:14 140:15 154:7
66:10 171:2, 14 196:21 204:11 209:5 regulations 9:21 12:5 36:12, 21 45:20 57:12 104:21 107:14 140:15 154:7
66:10 171:2, 14 196:21 204:11 209:5 regulations 9:21 12:5 36:12, 21 45:20 57:12 104:21 107:14 140:15 154:7 159:11 193:12
66:10 171:2, 14 196:21 204:11 209:5 regulations 9:21 12:5 36:12, 21 45:20 57:12 104:21 107:14 140:15 154:7
66:10 171:2, 14 196:21 204:11 209:5 regulations 9:21 12:5 36:12, 21 45:20 57:12 104:21 107:14 140:15 154:7 159:11 193:12 194:17 202:17
66:10 171:2, 14 196:21 204:11 209:5 regulations 9:21 12:5 36:12, 21 45:20 57:12 104:21 107:14 140:15 154:7 159:11 193:12 194:17 202:17 237:1 270:9
66:10 171:2, 14 196:21 204:11 209:5 regulations 9:21 12:5 36:12, 21 45:20 57:12 104:21 107:14 140:15 154:7 159:11 193:12 194:17 202:17 237:1 270:9 regulations.gov
66:10 171:2, 14 196:21 204:11 209:5 regulations 9:21 12:5 36:12, 21 45:20 57:12 104:21 107:14 140:15 154:7 159:11 193:12 194:17 202:17 237:1 270:9 regulations.gov
66:10 171:2, 14 196:21 204:11 209:5 regulations 9:21 12:5 36:12, 21 45:20 57:12 104:21 107:14 140:15 154:7 159:11 193:12 194:17 202:17 237:1 270:9 regulations.gov 13:16 16:8 136:10
66:10 171:2, 14 196:21 204:11 209:5 regulations 9:21 12:5 36:12, 21 45:20 57:12 104:21 107:14 140:15 154:7 159:11 193:12 194:17 202:17 237:1 270:9 regulations.gov 13:16 16:8 136:10 regulators 103:10
66:10 171:2, 14 196:21 204:11 209:5 regulations 9:21 12:5 36:12, 21 45:20 57:12 104:21 107:14 140:15 154:7 159:11 193:12 194:17 202:17 237:1 270:9 regulations.gov 13:16 16:8 136:10 regulators 103:10 204:12
66:10 171:2, 14 196:21 204:11 209:5 regulations 9:21 12:5 36:12, 21 45:20 57:12 104:21 107:14 140:15 154:7 159:11 193:12 194:17 202:17 237:1 270:9 regulations.gov 13:16 16:8 136:10 regulators 103:10 204:12
66:10 171:2, 14 196:21 204:11 209:5 regulations 9:21 12:5 36:12, 21 45:20 57:12 104:21 107:14 140:15 154:7 159:11 193:12 194:17 202:17 237:1 270:9 regulations.gov 13:16 16:8 136:10 regulators 103:10 204:12
66:10 171:2, 14 196:21 204:11 209:5 regulations 9:21 12:5 36:12, 21 45:20 57:12 104:21 107:14 140:15 154:7 159:11 193:12 194:17 202:17 237:1 270:9 regulations.gov 13:16 16:8 136:10 regulators 103:10 204:12 regulatory 17:19 44:5 64:12 120:17
66:10 171:2, 14 196:21 204:11 209:5 regulations 9:21 12:5 36:12, 21 45:20 57:12 104:21 107:14 140:15 154:7 159:11 193:12 194:17 202:17 237:1 270:9 regulations.gov 13:16 16:8 136:10 regulators 103:10 204:12 regulatory 17:19 44:5 64:12 120:17
66:10 171:2, 14 196:21 204:11 209:5 regulations 9:21 12:5 36:12, 21 45:20 57:12 104:21 107:14 140:15 154:7 159:11 193:12 194:17 202:17 237:1 270:9 regulations.gov 13:16 16:8 136:10 regulators 103:10 204:12 regulatory 17:19 44:5 64:12 120:17 122:9 124:18
66:10 171:2, 14 196:21 204:11 209:5 regulations 9:21 12:5 36:12, 21 45:20 57:12 104:21 107:14 140:15 154:7 159:11 193:12 194:17 202:17 237:1 270:9 regulations.gov 13:16 16:8 136:10 regulators 103:10 204:12 regulatory 17:19 44:5 64:12 120:17
66:10 171:2, 14 196:21 204:11 209:5 regulations 9:21 12:5 36:12, 21 45:20 57:12 104:21 107:14 140:15 154:7 159:11 193:12 194:17 202:17 237:1 270:9 regulations.gov 13:16 16:8 136:10 regulators 103:10 204:12 regulatory 17:19 44:5 64:12 120:17 122:9 124:18 126:2 271:19
66:10 171:2, 14 196:21 204:11 209:5 regulations 9:21 12:5 36:12, 21 45:20 57:12 104:21 107:14 140:15 154:7 159:11 193:12 194:17 202:17 237:1 270:9 regulations.gov 13:16 16:8 136:10 regulators 103:10 204:12 regulatory 17:19 44:5 64:12 120:17 122:9 124:18 126:2 271:19 rehabilitation
66:10 171:2, 14 196:21 204:11 209:5 regulations 9:21 12:5 36:12, 21 45:20 57:12 104:21 107:14 140:15 154:7 159:11 193:12 194:17 202:17 237:1 270:9 regulations.gov 13:16 16:8 136:10 regulators 103:10 204:12 regulatory 17:19 44:5 64:12 120:17 122:9 124:18 126:2 271:19 rehabilitation 213:20
66:10 171:2, 14 196:21 204:11 209:5 regulations 9:21 12:5 36:12, 21 45:20 57:12 104:21 107:14 140:15 154:7 159:11 193:12 194:17 202:17 237:1 270:9 regulations.gov 13:16 16:8 136:10 regulators 103:10 204:12 regulatory 17:19 44:5 64:12 120:17 122:9 124:18 126:2 271:19 rehabilitation 213:20
66:10 171:2, 14 196:21 204:11 209:5 regulations 9:21 12:5 36:12, 21 45:20 57:12 104:21 107:14 140:15 154:7 159:11 193:12 194:17 202:17 237:1 270:9 regulations.gov 13:16 16:8 136:10 regulators 103:10 204:12 regulatory 17:19 44:5 64:12 120:17 122:9 124:18 126:2 271:19 rehabilitation 213:20 re-implement
66:10 171:2, 14 196:21 204:11 209:5 regulations 9:21 12:5 36:12, 21 45:20 57:12 104:21 107:14 140:15 154:7 159:11 193:12 194:17 202:17 237:1 270:9 regulations.gov 13:16 16:8 136:10 regulatory 17:19 44:5 64:12 120:17 122:9 124:18 126:2 271:19 rehabilitation 213:20 re-implement 241:11
66:10 171:2, 14 196:21 204:11 209:5 regulations 9:21 12:5 36:12, 21 45:20 57:12 104:21 107:14 140:15 154:7 159:11 193:12 194:17 202:17 237:1 270:9 regulations.gov 13:16 16:8 136:10 regulators 103:10 204:12 regulatory 17:19 44:5 64:12 120:17 122:9 124:18 126:2 271:19 rehabilitation 213:20 re-implement 241:11 rein 49:17
66:10 171:2, 14 196:21 204:11 209:5 regulations 9:21 12:5 36:12, 21 45:20 57:12 104:21 107:14 140:15 154:7 159:11 193:12 194:17 202:17 237:1 270:9 regulations.gov 13:16 16:8 136:10 regulators 103:10 204:12 regulatory 17:19 44:5 64:12 120:17 122:9 124:18 126:2 271:19 rehabilitation 213:20 re-implement 241:11 rein 49:17
66:10 171:2, 14 196:21 204:11 209:5 regulations 9:21 12:5 36:12, 21 45:20 57:12 104:21 107:14 140:15 154:7 159:11 193:12 194:17 202:17 237:1 270:9 regulations.gov 13:16 16:8 136:10 regulatory 17:19 44:5 64:12 120:17 122:9 124:18 126:2 271:19 rehabilitation 213:20 reimplement 241:11 rein 49:17 reinstate 26:8
66:10 171:2, 14 196:21 204:11 209:5 regulations 9:21 12:5 36:12, 21 45:20 57:12 104:21 107:14 140:15 154:7 159:11 193:12 194:17 202:17 237:1 270:9 regulations.gov 13:16 16:8 136:10 regulators 103:10 204:12 regulatory 17:19 44:5 64:12 120:17 122:9 124:18 126:2 271:19 rehabilitation 213:20 re-implement 241:11 rein 49:17

reinstating 206:14
reinvestment 89:8
reiterate 279:17
rejoined 41:21
rejoined 41:21
rejoining 236:1
247:8 273:11
related 53:1
150:10
Relations 173:16
relationship 83:4
relative 39:2
relatively 13:6
160: <i>1</i>
relative's 256:3
relative \$ 250.5
relax 67:17
release 42:2 114:3
released 30:22
35:2 140:20
233:11
releasing 92:13
Reliable 91:15
222:15
reliance 39:10
171: <i>14</i>
relief 82:4 219:9,
11 258:20
relocate 197:22
reluctance 105:2
rely 20:21 40:7
61:21 82:16, 22
85:9
relying 240:6
remain 62:9
166: <i>10</i>
remainder 246:18
remained 166:8
remaining 51:14
287:21 288:17
289:11, 21 290:12
remains 51:10
remains 51:10
remains 51:10 85:6, 11 124:16
remains 51:10 85:6, 11 124:16 139:1 277:17
remains 51:10 85:6, 11 124:16 139:1 277:17 remarkable 23:13
remains 51:10 85:6, 11 124:16 139:1 277:17 remarkable 23:13
remains 51:10 85:6, 11 124:16 139:1 277:17
remains 51:10 85:6, 11 124:16 139:1 277:17 remarkable 23:13 remarks 159:3 291:7
remains 51:10 85:6, 11 124:16 139:1 277:17 remarkable 23:13 remarks 159:3 291:7 remember 47:4
remains 51:10 85:6, 11 124:16 139:1 277:17 remarkable 23:13 remarks 159:3 291:7 remember 47:4 291:13
remains 51:10 85:6, 11 124:16 139:1 277:17 remarkable 23:13 remarks 159:3 291:7 remember 47:4 291:13 remind 142:16
remains 51:10 85:6, 11 124:16 139:1 277:17 remarkable 23:13 remarks 159:3 291:7 remember 47:4 291:13 remind 142:16
remains 51:10 85:6, 11 124:16 139:1 277:17 remarkable 23:13 remarks 159:3 291:7 remember 47:4 291:13 remind 142:16
remains 51:10 85:6, 11 124:16 139:1 277:17 remarkable 23:13 remarks 159:3 291:7 remember 47:4 291:13 remind 142:16
remains 51:10 85:6, 11 124:16 139:1 277:17 remarkable 23:13 remarks 159:3 291:7 remember 47:4 291:13 remind 142:16
remains 51:10 85:6, 11 124:16 139:1 277:17 remarkable 23:13 remarks 159:3 291:7 remember 47:4 291:13 remind 142:16 reminder 13:9 15:9 37:3 58:4 65:1 75:17 101:20 113:3 128:3
remains 51:10 85:6, 11 124:16 139:1 277:17 remarkable 23:13 remarks 159:3 291:7 remember 47:4 291:13 remind 142:16 reminder 13:9 15:9 37:3 58:4 65:1 75:17 101:20 113:3 128:3 134:17 135:4
remains 51:10 85:6, 11 124:16 139:1 277:17 remarkable 23:13 remarks 159:3 291:7 remember 47:4 291:13 remind 142:16 reminder 13:9 15:9 37:3 58:4 65:1 75:17 101:20 113:3 128:3 134:17 135:4 163:20 179:15
remains 51:10 85:6, 11 124:16 139:1 277:17 remarkable 23:13 remarks 159:3 291:7 remember 47:4 291:13 remind 142:16 reminder 13:9 15:9 37:3 58:4 65:1 75:17 101:20 113:3 128:3 134:17 135:4 163:20 179:15 182:19 183:9
remains 51:10 85:6, 11 124:16 139:1 277:17 remarkable 23:13 remarks 159:3 291:7 remember 47:4 291:13 remind 142:16 reminder 13:9 15:9 37:3 58:4 65:1 75:17 101:20 113:3 128:3 134:17 135:4 163:20 179:15
remains 51:10 85:6, 11 124:16 139:1 277:17 remarkable 23:13 remarks 159:3 291:7 remember 47:4 291:13 remind 142:16 reminder 13:9 15:9 37:3 58:4 65:1 75:17 101:20 113:3 128:3 134:17 135:4 163:20 179:15 182:19 183:9 205:5 206:4
remains 51:10 85:6, 11 124:16 139:1 277:17 remarkable 23:13 remarks 159:3 291:7 remember 47:4 291:13 remind 142:16 reminder 13:9 15:9 37:3 58:4 65:1 75:17 101:20 113:3 128:3 134:17 135:4 163:20 179:15 182:19 183:9 205:5 206:4 211:16 220:12
remains 51:10 85:6, 11 124:16 139:1 277:17 remarkable 23:13 remarks 159:3 291:7 remember 47:4 291:13 remind 142:16 reminder 13:9 15:9 37:3 58:4 65:1 75:17 101:20 113:3 128:3 134:17 135:4 163:20 179:15 182:19 183:9 205:5 206:4 211:16 220:12 231:15 237:19
remains 51:10 85:6, 11 124:16 139:1 277:17 remarkable 23:13 remarks 159:3 291:7 remember 47:4 291:13 remind 142:16 reminder 13:9 15:9 37:3 58:4 65:1 75:17 101:20 113:3 128:3 134:17 135:4 163:20 179:15 182:19 183:9 205:5 206:4 211:16 220:12 231:15 237:19 247:12 249:17
remains 51:10 85:6, 11 124:16 139:1 277:17 remarkable 23:13 remarks 159:3 291:7 remember 47:4 291:13 remind 142:16 reminder 13:9 15:9 37:3 58:4 65:1 75:17 101:20 113:3 128:3 134:17 135:4 163:20 179:15 182:19 183:9 205:5 206:4 211:16 220:12 231:15 237:19

288:17 289:10, 20
290:11
reminders 183:8
remove 239:9
Renault 170:14
reneged 82:20
renewable 131:3 132:5 179:3, 4
244:16 282:6
renewing 168:3
repairs 43:16
repeat 277:21
repeatedly 168:5
210:7
repetitious 14:1 replace 64:11
178:19
replacement 20:13
175:22
replacing 39:15
222:13 223:3
report 11:19
30:16 35:1 47:12
92:14 95:20 110:21 153:6, 9 166:17 188:9 206:20 209:4 224:15 225:12
166:17 188:9
206:20 209:4
224:15 225:12
233:10, 14 244:11
255:13 262:13
282: <i>13</i> reporter 16: <i>10</i>
136:12
reporting 140:17
Reports 4:18
19:22 140:6, 13
142:6
represent 89:1
120:22 137:2 171:10 250:2
263:16
REPRESENTATIV
E 4:14 129:1
132:10 136:16
137:1
representing 52:9
54: <i>16</i> 84:9 125:5
161: <i>11</i> 177: <i>12</i> 236: <i>18</i> 252: <i>12</i>
258:1
represents 54:18
125:7
Republicans
174:22 175:7, 15
176:9, <i>13</i> request 14:5
request 14:5 requested 52:22
requesting 92:21
requests 246:3
require 43:11
56:2, 12, 20 67:21

71:5 83:11 122:16 123:21 172:2 175:3 286:14 required 93:7 103:11 120:9 124:1, 6, 13 160:7 203:4 204:7 244:14 requirement 24:5 39:19 93:5 245:4
requirements 17:2 172:6 245:22
requires 41:18 56:3 92:10 119:14 requiring 44:4
126:8
research 17:21 19:12 35:7 65:11 85:9 88:21 142:6 169:19 170:11
Researcher 16:18 18:10
researchers 18:18
reshare 210:4
resident 161:12
170:8 211:22
214:3 277:7, 14
278:3
residential 25:13 Residents 150:16
156:3 197:5.6
156:3 197:5, 6 213:21 259:10 278:5 279:2
278:5 279:2
286:19
resilience 9:18
228:2 <i>1</i> resiliency 122: <i>18</i>
124:3
Resources 3:6
57:14 69:2 88:22
125:18 160:4
171:12 203:11
209:20 210:2 224:2
respected 174:1
respiratory 32:17
96:17 100:11, 17,
20 108:1 109:14
114:22 144:2 154: <i>14</i> 163:6
208:6 211:3 215:7
216:6 268:20
respond 83:15
255:8 271:12
respondents 174:7
176: <i>4</i> response 22: <i>10</i>
26:21 38:3 72:4
76:22 93: <i>19</i> 94: <i>4</i>
102:20 122:2
129:6, 11 132:14

139:18 155:11
171:3, 13 173:3
177:7 182:4, 12, 22
183:6 187:8 205:2
216:19 219:20
220:4, 11, 14 227:6 249:4, 10, 19 252:6
254:20 263:2
272:6 287:17
288:4, 16 289:4, 9, 19 290:6, 10, 19
19 290:6, 10, 19 291:1, 5
responses 171:16
responsibility 53:5
137:15 194:12, 19
199:17
responsible 53:10 84:17 125:11
155:2 <i>1</i> 156:8
286:16
responsive 66:14
rest 20:16 203:6
207:4 239:12 259:13 260:11
restaurant 189:2
restore 42:15 66:3
69:17
restored 151:8
restoring 75:7 231:9
restricting 244:21
result 11:22 17:9
92:2 97: <i>1</i> 2 105: <i>14</i> 114:6 145: <i>10</i>
114:6 145:10
151: <i>10</i> 165: <i>19</i> 177: <i>18</i> 213: <i>17</i> 243: <i>18</i> 265: <i>7</i>
243:18 265:7
286:10
results 105:13
140:13
resume 133:6, 9 135:2
retailers 25:15
retired 19:21
28: <i>15</i> 41: <i>7</i> 59: <i>14</i>
72:14 98:8 103:6 159:10 168:13 196:12 221:4
159:10 108:15 196:12 221:4
233:8
Retiree 6:22
return 45:21
92:16 117:10
returned 46:13 268:11
returning 40:3
88:17
reveals 78:11
reversal 261:12
reverse 65: <i>17</i> 156: <i>13</i>
150.15

review 9:20 10:5 19:11 124:6 139:3 241:14 reviewed 10:9 174:9 reviewing 117:20 **revise** 116:9 119:7 156:17 224:6 **REVISED** 1:5 8:4 10:15 11:21 121:6 134:4 157:6 226:12 229:21 243:10 247:9 273:12 revision 157:9 **Revisions** 9:7 134:19 revolution 147:12 rewards 49:10 105:12 **rezoning** 143:16 rich 95:2 RICHARD 3:8 6:6 72:7, 13 187:3, RICHARDS 5:18 254:22 255:3, 5 ride 80:5 200:22 rides 115:1, 4 ridiculous 234:12 right 33:11 48:1 51:8 61:14 65:15 77:14 79:7 80:12 81:12 82:14 83:4 111:12 112:16, 19 115:6 120:7 130:8 165:13 166:21 167:5 181:10, 14, 19 186:8 187:9, 22 191:14 208:10 214:20 215:20 234:5, 9 247:4 249:2 254:2 264:8 272:17 275:12 276:13 281:8 284:16 287:4 **righting** 208:18 **rights** 44:18 69:6 117:16 146:14 rigorous 49:19 139:2 271:19 rise 46:17 47:19 95:10 167:4 210:20 255:10 risen 46:4 95:9 260:3 **rises** 178:15 194:3 rising 199:2 211:4 275:6 **risk** 18:5, 20 35:8 43:4 89:14 111:22

125:17 127:17 245:3 268:21 risks 19:2 194:11 **RITA** 3:20 98:2, 5 rivers 108:17 260:2 **Rivian** 264:11 266:2 RNG 282:5, 11 road 17:8 20:19 30:15 32:11, 14 62:6 67:4 69:9 85:2 92:9 97:12 114:7, 8 251:5 260:20 266:1 274:19 roadmap 123:13 roads 19:5 29:4 30:22 80:9 109:16 200:20 210:11 285:10 roadway 212:4 roadways 212:22 Roanoke 212:1, 2 ROBERTSON 5:17 173:6 177:4 **ROBIN** 6:20 7:6 9:1 223:17, 21 249:14 robs 96:19 **robust** 10:13 52:*16* 57:*5* 118:*1* 154:7 **Rock** 193:20 role 15:12 37:5 58:6, 16 61:14 75:19 76:7 84:22 88:19 101:22 102:10 128:5, 15 131:*16* 135:8, *18* 163:22 164:10 173:19 183:11 184:9 205:7, 17 231:17 232:5 247:14 248:1 roll 244:18 **rollback** 30:13 116:12 221:14 224:6 245:13 286:4 rollbacks 152:17 rolled 206:15 rolling 53:7 99:15 Roman 199:18 roof 178:11 213:4 Room 1:20 242:5 268:19 274:9 root 228:22 229:9 281:9 roots 215:5

reversing 33:1

rose 47:4 89:5 rosy 104:13 route 114:16 212:5 **routine** 204:13 row 200:17 RST-V 270:17 **Ruach** 33:4 rule 13:18 19:20 20:6 21:10, 18, 22 26:4 30:8 49:2 50:18, 20, 22 51:5 52:1 61:11, 12, 17 62:17 63:6, 7, 22 64:13, 16 65:16, 18 69:19, 20 70:14, 17 71:13 74:20 116:13 117:22 119:7, 10, 16, 19 120:2, 7 145:4, 5 152:8, 19 154:19 156:2 158:2 165:7 192:7 217:15 222:3 226:12 238:15, 17, 22 239:19 240:10, 11 243:16 250:6, 13 257:6 261:16 262:7 264:9, 15 269:11 279:10 286:6 rulemaking 10:20 12:11 69:17 86:22 118:2 121:6 131:9 132:1 147:13 158:3, 7, 14 217:9 Rules 13:20 44:16 47:8 50:2, 7 51:2 65:22 176:2 192:13 245:14 rule-writing 65:21 **ruling** 140:8 141:8 255:4 run 49:2 175:10, 18 212:7 213:8 280:10, 20 running 54:3 79:16 **runs** 189:1 rush 228:13 RVs 271:9 < S > **SABETTA** 3:19 94:7, 10, 11, 16 safe 18:19 50:22 62:17 69:16 86:16 116:13 144:19 148:9 152:8 225:22 275:12 safeguard 69:6

153:19 Safely 253:10 safer 55:6 169:16 190:12 193:8 204:3 safety 38:17 84:19 85:7 86:2 153:*15* 202:17 204:15 230:22 267:6 Saharan 73:8 **SAINZ** 6:12, 13 214:12, 15, 19 216:13 sales 25:21 36:14 43:12 55:9, 22 71:2, 4, 5 74:19 121:3 122:13 141:*3* 148:2*1* 160:13 203:20 218:9 242:11 262:8 263:13 Salesperson 177:12 **salient** 153:10 **salmon** 189:*1* salvage 188:21 SAM 4:20 142:21 143:3 samples 174:12 **Sands** 105:4, 20 **Sarah** 5:10 save 46:21 68:7 70:10 73:10 75:4 141:6 142:18 145:18 154:8 166:13 169:13, 14 175:9 204:18 219:4 276:7 saves 160:2 saving 23:21 175:*17* 181:*1* 207:16 231:7 **savings** 11:10 20:7 23:3, 11 59:19 74:3, 15 75:2 90:2 91:4 120:3, 5 131:2 159:16 163:10 168:10 saw 274:17 283:7 saying 18:18 79:2 81:11 181:13 224:4 285:22 says 51:19 203:18 252:12 scale 148:19 153:3 221:16 224:8 270:17 Scarborough 174:13 scarce 270:13

scared 233:13 scarf 285:2 scenario 190:4 scenarios 47:15 61:19 scenic 113:9 schedule 258:16, 22 scheduled 13:2 23:20 132:18 264:13 269:17, 22 272:8 287:7 scheme 29:18 schemes 242:16 school 41:7, 11 97:1, 2 98:20, 22 99:1, 6 100:17, 22 114:19 150:7 173:22 196:12 201:16 208:9 227:20 253:3, 4 school-aged 99:5 schoolchildren 100:22 schools 99:1 114:14 138:9 science 9:15 36:16 41:7, 11 46:3 51:19 78:11 83:16 92:14 117:13 138:11 145:15 153:3 191:11, 20 199:8 278:1 283:11 scientist 41:6 280:4, 14 Scientists 2:20 6:17, 18, 19, 20, 21 11:18 48:18 81:18 92:12 191:13 221:6 224:*1* 230:16 235:2 **scope** 64:16 218:18 scrap 85:20 screen 15:11 16:4 37:4 58:5 60:21 75:18 81:1 94:3 101:21 103:1 128:4 135:7 136:6 163:21 183:10 205:6 231:16 233:3 247:13 248:9 287:22 288:18 289:12, 22 290:13 **scrutiny** 65:18 sea 256:6 seagoing 38:15 searched 28:17 season 283:14

Seattle 189:*13* 198:3 200:7 202:3 283:2, 8 **Seattle's** 144:*15* second 8:13 20:5 21:18, 21 23:2 49:14 56:18 59:18 67:13 81:22 103:20 131:12 159:13, 15 171:4 238:22 239:2 270:19 281:20 seconds 32:10 Secretary 42:3 204:*1* **Section** 12:21 149:16 sections 274:14 sector 28:1 36:1 52:3 62:3 74:6 77:9 84:13 87:17 89:19 96:10, 13, 15 109:5 125:8 151:16 154:1 156:16 157:17 166:21 180:12 188:1 198:20 229:16 253:18 259:16, 18 264:2 265:6 278:14 securing 217:17 Security 66:6 117:8 226:2 sedans 123:6 see 17:11 21:5 22:5 29:15 50:16 54:8 59:5 60:17 61:2, 3 65:6, 7 71:20 72:10 80:17 81:1 93:21 96:1 99:4 108:19 109:5 120:2, 10 143:10 173:9 177:3 181:2*1* 182:*13* 183:4 184:13 186:18 187:4 196:5 220:20 221:13 224:5 227:1 231:12 232:22 233:1, 4 240:3 242:13 252:1 262:18 266:17 267:7, 12 270:2 272:12, 19 273:2, 17 276:22 286:19 289:5, 18 290:7, 8, 20, 22 291:3 **seeing** 60:22 166:*18* 178:2, *14*

196:1 202:2 218:2

229:5 261:3 283:14 seek 152:21 168:5 **seeking** 66:21 116:12 seeks 173:17 seen 29:4 88:4 177:19 181:5, 8 201:22 202:1 250:15 251:6 **segment** 50:13 seize 218:7 selected 53:10 sell 36:13 62:5 78:10 selling 177:14, 19 send 15:20, 22 37:13, 15 58:19, 21 73:4 76:10, 12 102:13, 15 105:21 128:18, 20 135:21 136:1 164:13, 15 183:1, 19, 21 184:3 205:20, 22 207:4 232:8, 10 248:4, 6 268:3 269:19 272:10 287:19 289:2 sending 267:18, 21 sends 158:22 Senior 48:16 213:19 291:9 seniors 213:13 sense 65:17 104:20 199:18 204:14 265:20 sensible 168:3 169:11 sensitive 213:12 245:8 258:15 259:2 sentence 121:4 **separate** 171:*10* 224:16 September 13:10 48:3 92:4 128:1 174:18 189:4 291:15 series 9:10 serious 34:4 47:10 244:9 269:5 seriously 137:8 209:4 251:11 servant 18:10 serve 38:14 115:20 162:8 168:14 208:18 **served** 143:3 serves 209:18 **service** 43:16

104.1
104:1
Services 253:7, 13
serving 291:11
SESSION 4:7
111:9 132: <i>16</i>
134:1
set 9:11 10:15
12:4, 17 15:5 19:4
24:6 26:7 30:3, 9
32:21 56:19 71:1,
<i>15</i> 94: <i>13</i> 97: <i>4</i>
98:12 112:12
119:8 138: <i>16</i>
148: <i>15</i> 151:20
148: <i>15</i> 151:20 154: <i>15</i> 155: <i>1</i> 157:20 160:7, <i>14</i> ,
157:20 160:7, <i>14</i> ,
16, 20 172:9, 15
190:8, <i>13</i> 194: <i>13</i>
195: <i>14</i> 211:9
231:5, 10 242:20
255:11 257:9
261: <i>14</i> , <i>16</i> , <i>20</i>
262:7 278:16, 20
286:8
Seth 9:3
sets 36:13 240:10
setting 17:2 33:15
55:8 67:7, 22 75:3
setting 17:2 33: <i>15</i> 55:8 67:7, 22 75: <i>3</i> 137:6 176:5 217:9
238:19 261:22
278:11 279:8, 9
285:9
settle 106:2
Settlement 227:15
settling 180:6
seven 82: <i>1</i> 194: <i>5</i>
200:17
seventh 95:18
seven-year-old
159:22
severe 18:13, 20
severe 18: <i>13</i> , <i>20</i> 108: <i>18</i> 153:8
229:2 260:6
275:18
severity 96:19
224:21 225:18
sewage 82:8
shadow 170:10
270:17
shake 73:5 107:11
-1 16.0
share 28:11 41:5 52:13 62:8 115:10
52:13 62:8 115:10
118:22 119:1
118:22 119: <i>1</i> 121:2 254: <i>1</i> 2
shared 57:15
160:11 219:8
shares 218:6
sharp 228:21
sharper 11:19
Samper IIII

•
shattered 188:18 sheets 235:8 shellfish 256:5
shepherded 103: <i>12</i> shift 55: <i>15</i> 73: <i>9</i>
89: <i>17</i> 126:20 141:9 162: <i>15</i> 171:2 218: <i>1</i> 242:9
244:16 shifts 170:21 Shindai 78:1
ship 51:9 185:6 shipping 172: <i>13</i>
271:7 shocked 18: <i>11</i> shocking 210: <i>4</i>
shopping 114: <i>15</i> shoreline 260:7 short 25: <i>5</i> 46:22
51:10, 15 82:15 225:16 239:1 245:5 272:16
288:5 shortage 178:15 186:11
shortages 186: <i>12</i> shortcuts 29: <i>14</i> 286: <i>12</i>
shortens 213:22 shorter 39:10 shortly 15:12 37:5
45:17 58:6 75:19 101:22 128:5 135:8 163:22
183:11 205:7 231:17 247:14
short-term 198: <i>18</i> show 10: <i>20</i> 91: <i>19</i> 140: <i>13</i> 165:22 236:22
showing 31: <i>1</i> 45: <i>17</i> 47: <i>9</i>
shown 65:20 140:17 150:17 196:20 248:16
275:16 shows 35:7 68:3 88:22 105:4 140:7 141:19 153:10 225:12 265:7
282: <i>13</i>
shut 82:3 105:3 178:4 189:15 shuttered 88:5
Siberia 237:11 sick 46:1 203:16
sickness 213:17 side 60:21 102:22 127:9 204:16 233:3 251:13

283:8 sidewalk 42:12 Sienna 38:22 39:1, 4,5
Sierra 3:16, 17 4:19 5:12, 14 106:17, 19 107:3
165: <i>I</i> 170:8 257:22 260: <i>I</i> 8 277:9
Sigma 98:9 sign 248:16 signal 66:7 158:22
signed 45:3 111:10 121:5 284:4
significant 11:13 29:15 35:17 56:3, 20 61:19 67:9 78:4 116:22
120:2 <i>I</i> 125: <i>I</i> 8 127: <i>I</i> 7 145:2 156: <i>I</i> 0 168: <i>I</i> 0
171: <i>12</i> 178: <i>10</i> 206:22 251: <i>3</i> 256: <i>14</i> 271: <i>16</i>
significantly 32:15 49:3, 10 71:6 126:21 243:15 sills 213:10
similar 11:3 50:7 172:6 175:12 Similarly 129:8
173:4 175:11 182:5 249:7 simple 63:13 192:3
simply 49:12 70:8 192:4 226:9 240:5 267:10 268:19 269:14
sincerely 146:3 Singh 283:20 284:1, 2
S-I-N-G-H 284:3 single 25:12 51:6 85:11 185:7 sink 51:9
Sioux 238:11 sister 189:6 237:10 sister-in-law's
255:20 sitting 49:22 situation 73:7
255:18 six 24:12 42:2 66:12 72:22 143:9 151:3 213:2
Sixth 34:22 260:9 skateboard 270:19 271:1

skeptical 204:12
ski 200:11, 12
skies 92: <i>3</i>
skiing 200:11
skilled 127:12
sky 202:20 203:12, 22 204:2
slam 47: <i>16</i>
slashing 140:22
slated 97:1 266:1
Slaughter 203:17
sledgehammer
203:19
sleep 35:10 256:3
slide 248:16
slight 14: <i>19</i> slightly 74:22
104: <i>14</i>
slim 192:10
slot 287:8
slot 287:8 slow 221:22 225:8,
10 257:4
slowed 24:22
slowing 21:19
104:5
slowly 16:10
136: <i>12</i> 210: <i>14</i> 240: <i>5</i> 251:8
285: <i>15</i> , <i>17</i>
SMAART 253:10
Small 2:7 16:17
28:16 160:3 181:6
Small 2:7 16:17 28:16 160:3 181:6 197:1, 11 213:14 231:1 275:12
231:1 275:12
smaller 29:8
smallest 86:10
270:18
smart 120:8
smarter 55:6 smell 208: <i>14</i>
smelly 222:19
SMITH 3.7 20
71:19 98:2, 5
71:19 98:2, 5 100:1 101:3, 9, 11, 14, 18
14, 18
smog 45:12, 14
111:5, 7 114:2
153:18 197:3, 7, 14,
16, 19 198:21
258:8 smog-forming
156:6
smoke 92.3 5
114:1 189:5 190:2 255:10 256:2, 14 267:19 269:7
255:10 256:2, 14
267:19 269:7
283:0, /
smoky 113: <i>19</i>
283:5
smooth 66:21

Snow 227:9, 12, 14,
15
snowstorms 224:12
soar 114:1
sobering 11:16
34:22
so-called 93:2
116: <i>13</i>
social 105: <i>15</i>
161:15 163:2 society 123:15 286:17
society 123: <i>15</i>
286: <i>17</i>
soda 137:22
soil 240:17
solar 39:13, 19
59:16 236:14
271:7 281:12
sold 54:19 67:3
74:11 94:19
238:21 265:14
solicited 62:20
solicited 62:20
120.21 185.20
solution 123:19 129:21 185:20 189:14 276:2, 11 280:18 281:2, 7
109.14 2/0.2, 11
280:76 281:2, 7
202.7
solutions 46:3
60:7 84:14 121:12
125: <i>19</i> 130:2 <i>1</i>
131:2 <i>1</i> 172: <i>11</i>
280:16 282:18
solve 45:5 47:10
solve 45:5 47:10 48:7 87:9 190:15
solve 45:5 47:10 48:7 87:9 190:15 somebody 162:5
48:7 87:9 190: <i>15</i> somebody 162: <i>5</i> somewhat 168:22
48:7 87:9 190:15 somebody 162:5 somewhat 168:22 174:19
48:7 87:9 190:15 somebody 162:5 somewhat 168:22 174:19 son 18:6 115:1
48:7 87:9 190:15 somebody 162:5 somewhat 168:22 174:19 son 18:6 115:1 194:1, 5 238:6
48:7 87:9 190:15 somebody 162:5 somewhat 168:22 174:19 son 18:6 115:1 194:1, 5 238:6
48:7 87:9 190:15 somebody 162:5 somewhat 168:22 174:19 son 18:6 115:1 194:1, 5 238:6 256:1, 12 285:18
48:7 87:9 190:15 somebody 162:5 somewhat 168:22 174:19 son 18:6 115:1 194:1, 5 238:6
48:7 87:9 190:15 somebody 162:5 somewhat 168:22 174:19 son 18:6 115:1 194:1, 5 238:6 256:1, 12 285:18 sons 159:18 son's 195:17
48:7 87:9 190:15 somebody 162:5 somewhat 168:22 174:19 son 18:6 115:1 194:1, 5 238:6 256:1, 12 285:18 sons 159:18 son's 195:17 Soon 24:15 60:8
48:7 87:9 190:15 somebody 162:5 somewhat 168:22 174:19 son 18:6 115:1 194:1, 5 238:6 256:1, 12 285:18 sons 159:18 son's 195:17 Soon 24:15 60:8 156:19 158:16
48:7 87:9 190:15 somebody 162:5 somewhat 168:22 174:19 son 18:6 115:1 194:1, 5 238:6 256:1, 12 285:18 sons 159:18 son's 195:17 Soon 24:15 60:8 156:19 158:16 246:5 271:18
48:7 87:9 190:15 somebody 162:5 somewhat 168:22 174:19 son 18:6 115:1 194:1, 5 238:6 256:1, 12 285:18 sons 159:18 son's 195:17 Soon 24:15 60:8 156:19 158:16 246:5 271:18 sooner 151:8
48:7 87:9 190:15 somebody 162:5 somewhat 168:22 174:19 son 18:6 115:1 194:1, 5 238:6 256:1, 12 285:18 sons 159:18 son's 195:17 Soon 24:15 60:8 156:19 158:16 246:5 271:18 sooner 151:8 soot 213:4, 9, 11
48:7 87:9 190:15 somebody 162:5 somewhat 168:22 174:19 son 18:6 115:1 194:1, 5 238:6 256:1, 12 285:18 sons 159:18 son's 195:17 Soon 24:15 60:8 156:19 158:16 246:5 271:18 sooner 151:8 soot 213:4, 9, 11 Sorority 98:10
48:7 87:9 190:15 somebody 162:5 somewhat 168:22 174:19 son 18:6 115:1 194:1, 5 238:6 256:1, 12 285:18 sons 159:18 son's 195:17 Soon 24:15 60:8 156:19 158:16 246:5 271:18 sooner 151:8 soot 213:4, 9, 11 Sorority 98:10
48:7 87:9 190:15 somebody 162:5 somewhat 168:22 174:19 son 18:6 115:1 194:1, 5 238:6 256:1, 12 285:18 sons 159:18 son's 195:17 Soon 24:15 60:8 156:19 158:16 246:5 271:18 sooner 151:8 soot 213:4, 9, 11 Sorority 98:10 sorry 61:1, 4 130:2 233:6
48:7 87:9 190:15 somebody 162:5 somewhat 168:22 174:19 son 18:6 115:1 194:1, 5 238:6 256:1, 12 285:18 sons 159:18 son's 195:17 Soon 24:15 60:8 156:19 158:16 246:5 271:18 sooner 151:8 soot 213:4, 9, 11 Sorority 98:10 sorry 61:1, 4 130:2 233:6 272:20 281:19
48:7 87:9 190:15 somebody 162:5 somewhat 168:22 174:19 son 18:6 115:1 194:1, 5 238:6 256:1, 12 285:18 sons 159:18 son's 195:17 Soon 24:15 60:8 156:19 158:16 246:5 271:18 sooner 151:8 soot 213:4, 9, 11 Sorority 98:10 sorry 61:1, 4 130:2 233:6 272:20 281:19 sort 19:1 81:11
48:7 87:9 190:15 somebody 162:5 somewhat 168:22 174:19 son 18:6 115:1 194:1, 5 238:6 256:1, 12 285:18 sons 159:18 son's 195:17 Soon 24:15 60:8 156:19 158:16 246:5 271:18 sooner 151:8 soot 213:4, 9, 11 Sorority 98:10 sorry 61:1, 4 130:2 233:6 272:20 281:19 sort 19:1 81:11 185:22 248:14
48:7 87:9 190:15 somebody 162:5 somewhat 168:22 174:19 son 18:6 115:1 194:1, 5 238:6 256:1, 12 285:18 son's 195:17 Soon 24:15 60:8 156:19 158:16 246:5 271:18 sooner 151:8 soot 213:4, 9, 11 Sorority 98:10 sorry 61:1, 4 130:2 233:6 272:20 281:19 sort 19:1 81:11 185:22 248:14 sought 168:9
48:7 87:9 190:15 somebody 162:5 somewhat 168:22 174:19 son 18:6 115:1 194:1, 5 238:6 256:1, 12 285:18 sons 159:18 son's 195:17 Soon 24:15 60:8 156:19 158:16 246:5 271:18 sooner 151:8 soot 213:4, 9, 11 Sorority 98:10 sorry 61:1, 4 130:2 233:6 272:20 281:19 sort 19:1 81:11 185:22 248:14 sought 168:9 sound 156:21
48:7 87:9 190:15 somebody 162:5 somewhat 168:22 174:19 son 18:6 115:1 194:1, 5 238:6 256:1, 12 285:18 sons 159:18 son's 195:17 Soon 24:15 60:8 156:19 158:16 246:5 271:18 sooner 151:8 soot 213:4, 9, 11 Sorority 98:10 sorry 61:1, 4 130:2 233:6 272:20 281:19 sort 19:1 81:11 185:22 248:14 sought 168:9 sound 156:21 191:12
48:7 87:9 190:15 somebody 162:5 somewhat 168:22 174:19 son 18:6 115:1 194:1, 5 238:6 256:1, 12 285:18 sons 159:18 son's 195:17 Soon 24:15 60:8 156:19 158:16 246:5 271:18 sooner 151:8 soot 213:4, 9, 11 Sorority 98:10 sorry 61:1, 4 130:2 233:6 272:20 281:19 sort 19:1 81:11 185:22 248:14 sought 168:9 sound 156:21 191:12 sounding 92:12
48:7 87:9 190:15 somebody 162:5 somewhat 168:22 174:19 son 18:6 115:1 194:1, 5 238:6 256:1, 12 285:18 sons 159:18 son's 195:17 Soon 24:15 60:8 156:19 158:16 246:5 271:18 sooner 151:8 soot 213:4, 9, 11 Sorority 98:10 sorry 61:1, 4 130:2 233:6 272:20 281:19 sort 19:1 81:11 185:22 248:14 sought 168:9 sound 156:21 191:12 sounding 92:12 source 28:1 36:2
48:7 87:9 190:15 somebody 162:5 somewhat 168:22 174:19 son 18:6 115:1 194:1, 5 238:6 256:1, 12 285:18 sons 159:18 son's 195:17 Soon 24:15 60:8 156:19 158:16 246:5 271:18 sooner 151:8 soot 213:4, 9, 11 Sorority 98:10 sorry 61:1, 4 130:2 233:6 272:20 281:19 sort 19:1 81:11 185:22 248:14 sought 168:9 sound 156:21 191:12 sounding 92:12 source 28:1 36:2 64:6 82:12 120:18
48:7 87:9 190:15 somebody 162:5 somewhat 168:22 174:19 son 18:6 115:1 194:1, 5 238:6 256:1, 12 285:18 sons 159:18 son's 195:17 Soon 24:15 60:8 156:19 158:16 246:5 271:18 sooner 151:8 soot 213:4, 9, 11 Sorority 98:10 sorry 61:1, 4 130:2 233:6 272:20 281:19 sort 19:1 81:11 185:22 248:14 sought 168:9 sound 156:21 191:12 sounding 92:12 source 28:1 36:2 64:6 82:12 120:18
48:7 87:9 190:15 somebody 162:5 somewhat 168:22 174:19 son 18:6 115:1 194:1, 5 238:6 256:1, 12 285:18 sons 159:18 son's 195:17 Soon 24:15 60:8 156:19 158:16 246:5 271:18 sooner 151:8 soot 213:4, 9, 11 Sorority 98:10 sorry 61:1, 4 130:2 233:6 272:20 281:19 sort 19:1 81:11 185:22 248:14 sought 168:9 sound 156:21 191:12 sounding 92:12 source 28:1 36:2

229:16 242:6 244:20 253:18 259:6, 17, 19 282:4 **Sources** 2:*3* 91:*15* 115:21 186:21 259:15 281:11 **South** 5:5, 10 155:19 158:1, 10, 12 170:11 215:6 Southeast 151:4 **southern** 145:*13* **Southwest** 212:*1*, 2 sovereign 238:11 sovereignty 227:19 **space** 263:14 **spaces** 114:13 spaceships 191:18 SparkeTap 2:17 SparkleTap 38:14 speak 14:15, 18 15:21 16:10 19:19 23:5 27:12 34:1 37:14 44:14 58:20 60:9 65:2, 13 75:13 76:11 91:3 93:10 94:12 102:14 103:6 106:9 119:2 121:*15* 122:*11* 128:19 135:22 136:12 140:3 161:7 164:14 167:8 172:17 173:14 183:20 184:2 191:2 201:12 205:21 206:11 216:11 221:7 228:1 232:9 248:5, 15 249:13 252:18 255:4 263:10 269:17, 18, 22 270:5 272:3, 8, 10 273:16 276:20 277:13 278:3 279:17 280:5 284:10 287:7, 9, 13 288:1, 7, 13, 19, 22 289:8, 12, 15, 22 290:3, 13, 16 291:4 **Speaker** 2:6 3:1, 5 4:1, 8 5:1, 9 6:1, 7 7:1 14:2, 8 16:9, 12, 13 19:15 22:4, 13, 14 26:15 27:1, 2 31:18 33:19 37:18 38:5, 6 40:21 44:8 48:13 52:5 54:12 58:14 59:2 60:11 64:22 68:17, 18 71:19, 22 72:6, 7 76:5, 17

77:2, 3, 11 80:16 84:1 87:3 90:13 93:13, 20 94:6, 7 98:2 102:8, *17* 106:11 110:4 112:22 115:12 118:9 121:*18* 122:4, 5 125:2 128:13 129:1, 7, 13, 14 135:16 136:11, 14, 15 139:13, 20, 21 142:21 146:6 149:8 152:4 155:7, 13, 14 159:5 161:4 164:8, 17, 18 167:15 170:4 172:19 177:8 179:12 181:18, 20 182:14, 16 184:7, 13 187:3, 10, 12, 13 190:19 191:5, 14 192:19 200:3 201:8 205:15 206:3 209:9 211:15 214:12 216:13, 21 219:16, 21 220:6, 7, 19, 22 223:17 226:22 227:8, 9 230:6 232:3, 15, 16 235:19 237:18 240:22 243:4 247:21 248:9, 10 249:6, 20 251:22 252:8 254:14, 22 257:18 262:18 263:4 266:15 279:21 283:20 speakers 13:4 14:*3*, *5*, *12* 15:*5*, *17* 37:10 52:22 58:11 76:2, 16 91:8 102:5 128:10 132:9, 21 134:21 135:13 164:5 173:5 182:5 183:16 185:12 195:22 205:12 209:14 231:22 232:13 247:18 248:14 249:12 272:16 287:22 288:6, 10, 13, 18 289:7, 11, 21 290:12 **speaking** 15:10, 13 16:*3* 37:*3*, *6* 53:*13* 58:4, 7 75:17, 20 84:7 91:1 101:20 102:1 128:3, 6

143:6 163:20 164:1 183:9, 12 191:1, 6, 10 205:5, 8 211:22 214:20 217:3 230:15 231:15, 18 233:8 243:8 247:12, 15 248:8 272:20 277:9 **Special** 187:*18* specialists 17:17 specializing 27:6 **species** 202:13 **specific** 153:10 271:10, 16 275:12 specifically 228:3 spectrum 18:6 126:5 127:*1* 275:14 speed 24:22 31:14 67:8 78:20 153:2 speeding 46:2 67:21 SPENCER 4:20 142:2*1* 143:2, *3* **spend** 68:7 **spending** 23:*13* 68:6 120:5 145:*19* 215:13 spent 19:7 146:12 177:13 189:6 215:11 spewing 210:12 **spirit** 33:*4* **spiritual** 33:3, 7, *13* 118:2*1* **Spirituality** 33:9 spoke 246:20 **spoken** 236:9 **spouses** 268:15 sprawling 113:12 144:12 145:13, 18 **spur** 26:2 74:4 163:9 166:13 207:11 **spurred** 89:10 stability 126:2 stage 56:19 172:15 stake 82:21 151:13 226:18 stakeholder 12:19 stakeholders 55:13 56:4 117:22 123:1 131:15 148:14 219:7 **stakes** 219:9 stall 242:17 **stamped** 113:*13* stance 206:17

standard 24:21 43:22 62:15 83:6 131:14 141:10 157:20 158:19, 22 169:9, 11 174:6 250:18 261:22 265:11 269:10 278:1, 12 279:9, 18 285:9 STANDARDS 1:6 8:6 9:8 10:7, 16, *18* 11:5, 6, *13*, 21 12:12, 18 17:1, 4, 6 25:19 26:1, 7, 8, 9 27:20 28:9, 14 29:9, 13 30:3, 10, 14 31:13 32:22 33:16 35:6 36:10 44:2 45:22 50:21 51:7 52:14, 17, 22 56:18, 20 57:21, 22 67:8 68:1 69:12, *13*, *16* 70:3 71:*16* 73:13, 15, 18 74:2, 14, 16, 22 75:1, 3 77:15 78:5 81:9 82:12, 16 88:14 89:1, 7, 13, 19 90:1, 5 93:9 94:*14* 95:13 96:4 97:6, 15 98:13 99:15 100:7, 9 104:3 105:12, 20 106:1 107:22 108:21 110:1, 16 112:13 113:16 115:8 116:10, 14, 17 117:5, 7, 13 118:1, *3* 119:8 121:8, *13* 124:17, 18 126:1, 5, 17 130:2 131:6, 19 132:3 134:6, 20 137:6, 19 138:14, 16 139:2, 5, 6 140:12, 16 141:14, 15 144:6, 7 145:17, 22 146:1, 19 147:17 148:4 149:21 151:21 152:16, 22 153:3 154:2, 6, 16, 18, 19 155:*1* 156:*13*, *15*, 18, 20 157:6, 8, 11, 15 158:18 159:13 160:7, 15, 17, 19 161:1 162:17, 20, 22 163:7 165:22 166:11, 13 167:6, 9 168:*3* 169:*13*, *17*, 21 174:3 175:11 176:2, 5, 11, 22

188:7 190:9, *14* 192:7 193:10, 13, 18 194:14 195:15 196:*16* 199:*8*, *10*, 15 204:20 206:15 207:3, 6, 19 208:17, 19 211:10, 11 212:14, 16 214:6 217:6, 10, 16, 22 218:7, 14 219:1 221:9, 11, 15, 17, 18, 20 223:5, 12, 14 224:7, 9, 20 225:2 229:22 230:2 231:6, 9, 11 234:6, 11, 18, 20 235:10, 12 238:14 239:9, 11, 13, 16, 17 240:6, 10 241:11 242:21 243:1, 12, 14 244:5, 6, 18 245:18, 21, 22 246:4 247:10 254:3, 8 255:12 257:9 260:17 261:7, 8, 13, 20 262:15 263:20 264:8, 18 265:3, 15 266:5 267:9 268:17 269:2 273:14 274:4 276:16 277:15 278:7, 11, 13, 16 279:1 280:7 282:9, *19* 283:*18* 284:*18* 286:1, 2, 5, 9, 10 287:2, 3, 4 **standing** 146:*17* 288:15 standpoint 143:12 stands 126:15 **Stanlitis** 218:*17* Star 22:9 26:20 38:1 58:17 72:3 76:8, 21 93:17 94:*1* 102:*11* 122:*1* 128:16 129:5 132:13 135:19 164:11 173:1 182:3 184:12 205:18 216:17 227:4 232:6 248:2 249:3, 18 252:5 254:19 263:1 266:16 287:12 stark 219:9 274:13 starkly 188:*17* start 15:4 30:13 60:20 62:5 98:16 140:8 201:21 207:4 224:4 233:2

135:6, 8 136:5

207:2 209:2

stand 120:16

273:22 274:18
286:5
started 8:10 21:4
25:3 72:20 86:15
134:11 253:11
285: <i>15</i>
starting 215:4
274:5 starts 55:21 80:12
Starvation 104:8
starved 237:10
State 4:14 14:5
16: <i>14</i> 17: <i>17</i> 19: <i>16</i>
22:15 27:3 31:19
33:20 38:7 40:22
44:9 45:16 48:14 52:6 54:13 56:4,
13 59:9 60:12
65:2 68:19 72:8
77:4 80:20 81:3 84:2 87:4 90:14
84:2 87:4 90:14
94:8, 20, 22 95:20 98:3 102:18
106: <i>12</i> 110: <i>5</i> , <i>20</i>
111:6, 11, 15 113:1,
9 115:13 117:15
118: <i>10</i> 119: <i>3</i>
122:6 125:3
129:15 136:16, 22
137:1, 13 139:22
142:22 145: <i>14</i> 146:7 149:9 152: <i>5</i> ,
<i>13</i> 155: <i>15</i> 158: <i>6</i>
159:6 161:5
164:19 166:5
167: <i>16</i> 170: <i>5</i> 177: <i>10</i> 179: <i>13</i> , <i>20</i>
180:9 182:17
184: <i>16</i> , <i>19</i> 185: <i>1</i>
187: <i>14</i> 188: <i>13</i>
189:9 190: <i>20</i>
192:21 196:8 197:18 200:4
197:18 200:4
201:9 206:6 209:10 211:18
209: <i>10</i> 211: <i>18</i> 214: <i>13</i> , <i>16</i> 216:22
220:9 221:2, 8
223:18 224:2 227:10 232:18
236:4 238:2 241:3
243:5 249:2 <i>1</i> 251:7 252:9
253:19 255:1
257:19 260:4, 10,
14 261:1.3.10
263:5 266:20
270:6 273:20
263:5 266:20 270:6 273:20 276:7 277:3 278:19 279:7, 22
280:3 283:21

stated 74:19
100:8 123:20
142: <i>1</i> 162:2 <i>1</i>
243: <i>13</i>
statement 63:22
124: <i>15</i> 239:2 <i>1</i> 272: <i>13</i>
statements 13:22
14:2, 3, 6
STATES 1:1 8:3
28:2 32: <i>12</i> 46: <i>15</i>
54:20 84:14 89:3
90:10 105:17
113:15, 17 115:7
116:2 117:12, 16
125:10 134:3
151:15 166:9, 19,
22 167:2 172:3
200:8 201:18
209:2 228:7
209:2 228:7 229:17 238:18 253:20 255:13
253:20 255:13
256:21 263:22
264:3 278:14
279:11 281:22
state's 259:13
station 43:15
stations 21:6 25:4,
9, 16 42:21 43:8
statistics 01.10
statistics 91:19
191: <i>11</i>
191: <i>11</i> statutes 66: <i>1</i>
191: <i>11</i> statutes 66: <i>1</i>
191: <i>11</i> statutes 66: <i>1</i> statutory 66: <i>5</i> stay 67: <i>4</i> 71: <i>10</i>
191: <i>11</i> statutes 66: <i>1</i> statutory 66: <i>5</i> stay 67: <i>4</i> 71: <i>10</i> 103: <i>19</i> 153: <i>19</i>
191:11 statutes 66:1 statutory 66:5 stay 67:4 71:10 103:19 153:19 194:3 215:6
191:11 statutes 66:1 statutory 66:5 stay 67:4 71:10 103:19 153:19 194:3 215:6 248:17 288:11
191:11 statutes 66:1 statutory 66:5 stay 67:4 71:10 103:19 153:19 194:3 215:6 248:17 288:11 stay-at-home 45:6
191:11 statutes 66:1 statutory 66:5 stay 67:4 71:10 103:19 153:19 194:3 215:6 248:17 288:11 stay-at-home 45:6 stayed 66:8
191:11 statutes 66:1 statutory 66:5 stay 67:4 71:10 103:19 153:19 194:3 215:6 248:17 288:11 stay-at-home 45:6 stayed 66:8 137:12 178:5
191:11 statutes 66:1 statutory 66:5 stay 67:4 71:10 103:19 153:19 194:3 215:6 248:17 288:11 stay-at-home 45:6 stayed 66:8
191:11 statutes 66:1 statutory 66:5 stay 67:4 71:10 103:19 153:19 194:3 215:6 248:17 288:11 stay-at-home 45:6 stayed 66:8 137:12 178:5 staying 35:19 189:14 steady 65:21
191:11 statutes 66:1 statutory 66:5 stay 67:4 71:10 103:19 153:19 194:3 215:6 248:17 288:11 stay-at-home 45:6 stayed 66:8 137:12 178:5 staying 35:19 189:14 steady 65:21 steel 86:3, 12
191:11 statutes 66:1 statutory 66:5 stay 67:4 71:10 103:19 153:19 194:3 215:6 248:17 288:11 stay-at-home 45:6 stayed 66:8 137:12 178:5 staying 35:19 189:14 steady 65:21 steel 86:3, 12
191:11 statutes 66:1 statutory 66:5 stay 67:4 71:10 103:19 153:19 194:3 215:6 248:17 288:11 stay-at-home 45:6 stayed 66:8 137:12 178:5 staying 35:19 189:14 steady 65:21 steel 86:3, 12 233:19 234:1 steered 223:2
191:11 statutes 66:1 statutory 66:5 stay 67:4 71:10 103:19 153:19 194:3 215:6 248:17 288:11 stay-at-home 45:6 stayed 66:8 137:12 178:5 staying 35:19 189:14 steady 65:21 steel 86:3, 12 233:19 234:1 steered 223:2 step 21:19 30:11
191:11 statutes 66:1 statutory 66:5 stay 67:4 71:10 103:19 153:19 194:3 215:6 248:17 288:11 stay-at-home 45:6 stayed 66:8 137:12 178:5 staying 35:19 189:14 steady 65:21 steel 86:3, 12 233:19 234:1 steered 223:2 step 21:19 30:11 47:9 95:15 111:7,
191:11 statutes 66:1 statutory 66:5 stay 67:4 71:10 103:19 153:19 194:3 215:6 248:17 288:11 stay-at-home 45:6 stayed 66:8 137:12 178:5 staying 35:19 189:14 steady 65:21 steel 86:3, 12 233:19 234:1 steered 223:2 step 21:19 30:11 47:9 95:15 111:7, 12 112:10, 16
191:11 statutes 66:1 statutory 66:5 stay 67:4 71:10 103:19 153:19 194:3 215:6 248:17 288:11 stay-at-home 45:6 stayed 66:8 137:12 178:5 staying 35:19 189:14 steady 65:21 steel 86:3, 12 233:19 234:1 steered 223:2 step 21:19 30:11 47:9 95:15 111:7, 12 112:10, 16 190:12 198:18
191:11 statutes 66:1 statutory 66:5 stay 67:4 71:10 103:19 153:19 194:3 215:6 248:17 288:11 stay-at-home 45:6 stayed 66:8 137:12 178:5 staying 35:19 189:14 steady 65:21 steel 86:3, 12 233:19 234:1 steered 223:2 step 21:19 30:11 47:9 95:15 111:7, 12 112:10, 16 190:12 198:18 207:21 208:18
191:11 statutes 66:1 statutory 66:5 stay 67:4 71:10 103:19 153:19 194:3 215:6 248:17 288:11 stay-at-home 45:6 stayed 66:8 137:12 178:5 staying 35:19 189:14 steady 65:21 steel 86:3, 12 233:19 234:1 steered 223:2 step 21:19 30:11 47:9 95:15 111:7, 12 112:10, 16 190:12 198:18 207:21 208:18 215:20 237:6
191:11 statutes 66:1 statutory 66:5 stay 67:4 71:10 103:19 153:19 194:3 215:6 248:17 288:11 stay-at-home 45:6 stayed 66:8 137:12 178:5 staying 35:19 189:14 steady 65:21 steel 86:3, 12 233:19 234:1 steered 223:2 step 21:19 30:11 47:9 95:15 111:7, 12 112:10, 16 190:12 198:18 207:21 208:18 215:20 237:6 254:2 264:8
191:11 statutes 66:1 statutory 66:5 stay 67:4 71:10 103:19 153:19 194:3 215:6 248:17 288:11 stay-at-home 45:6 stayed 66:8 137:12 178:5 staying 35:19 189:14 steady 65:21 steel 86:3, 12 233:19 234:1 steered 223:2 step 21:19 30:11 47:9 95:15 111:7, 12 112:10, 16 190:12 198:18 207:21 208:18 215:20 237:6 254:2 264:8 284:16 286:3
191:11 statutes 66:1 statutory 66:5 stay 67:4 71:10 103:19 153:19 194:3 215:6 248:17 288:11 stay-at-home 45:6 stayed 66:8 137:12 178:5 staying 35:19 189:14 steady 65:21 steel 86:3, 12 233:19 234:1 steered 223:2 step 21:19 30:11 47:9 95:15 111:7, 12 112:10, 16 190:12 198:18 207:21 208:18 215:20 237:6 254:2 264:8 284:16 286:3
191:11 statutes 66:1 statutory 66:5 stay 67:4 71:10 103:19 153:19 194:3 215:6 248:17 288:11 stay-at-home 45:6 stayed 66:8 137:12 178:5 staying 35:19 189:14 steady 65:21 steel 86:3, 12 233:19 234:1 steered 223:2 step 21:19 30:11 47:9 95:15 111:7, 12 112:10, 16 190:12 198:18 207:21 208:18 215:20 237:6 254:2 264:8 284:16 286:3 Stephanie 227:9, 14 STEPHEN 5:3
191:11 statutes 66:1 statutory 66:5 stay 67:4 71:10 103:19 153:19 194:3 215:6 248:17 288:11 stay-at-home 45:6 stayed 66:8 137:12 178:5 staying 35:19 189:14 steady 65:21 steel 86:3, 12 233:19 234:1 steered 223:2 step 21:19 30:11 47:9 95:15 111:7, 12 112:10, 16 190:12 198:18 207:21 208:18 215:20 237:6 254:2 264:8 284:16 286:3 Stephanie 227:9, 14 STEPHEN 5:3 270:3, 7
191:11 statutes 66:1 statutory 66:5 stay 67:4 71:10 103:19 153:19 194:3 215:6 248:17 288:11 stay-at-home 45:6 stayed 66:8 137:12 178:5 staying 35:19 189:14 steady 65:21 steel 86:3, 12 233:19 234:1 steered 223:2 step 21:19 30:11 47:9 95:15 111:7, 12 112:10, 16 190:12 198:18 207:21 208:18 215:20 237:6 254:2 264:8 284:16 286:3 Stephanie 227:9, 14 STEPHEN 5:3 270:3, 7 stepping 55:7
191:11 statutes 66:1 statutory 66:5 stay 67:4 71:10 103:19 153:19 194:3 215:6 248:17 288:11 stay-at-home 45:6 stayed 66:8 137:12 178:5 staying 35:19 189:14 steady 65:21 steel 86:3, 12 233:19 234:1 steered 223:2 step 21:19 30:11 47:9 95:15 111:7, 12 112:10, 16 190:12 198:18 207:21 208:18 215:20 237:6 254:2 264:8 284:16 286:3 Stephanie 227:9, 14 STEPHEN 5:3 270:3, 7

168:2
Steven 155:7
steward 53:12
161: <i>12</i>
stewards 53:5, 10
54:1, 2, 9 99:7 stifling 34:12
sting 190:2
stock 256:10
stolen 44:20 stone 103:17
stone 103:17
stop 53:22 192:6 215:10 226:8
233:17
stops 114:20
storied 170:12
stories 107:12
210:2, 5 219:7
storm 151:3 228:11, 19 272:5
storms 73:7
108:19 200:16
story 24:14 63:18
107: <i>19</i> 115: <i>10</i> 143: <i>13</i> 198: <i>6</i>
143: <i>13</i> 198:6 STOUT 4:4
112:22 113:5, 7
stoves 236:14
straight 80:5
261: <i>14</i>
strain 195:8
strand 226:3
strange 81:10
Strangers 21:6
strategic 127:8
strategic 127:8 144: <i>17</i> 146: <i>14</i>
strategic 127:8 144:17 146:14 163:14 strategies 35:18
strategic 127:8 144:17 146:14 163:14 strategies 35:18 strategy 56:13
strategic 127:8 144:17 146:14 163:14 strategies 35:18 strategy 56:13 84:6 116:20
strategic 127:8 144:17 146:14 163:14 strategies 35:18 strategy 56:13 84:6 116:20 stream 139:10
strategic 127:8 144:17 146:14 163:14 strategies 35:18 strategy 56:13 84:6 116:20 stream 139:10 streams 188:22
strategic 127:8 144:17 146:14 163:14 strategies 35:18 strategy 56:13 84:6 116:20 stream 139:10 streams 188:22 Street 1:21 213:13
strategic 127:8 144:17 146:14 163:14 strategies 35:18 strategy 56:13 84:6 116:20 stream 139:10 streams 188:22 Street 1:21 213:13 streets 202:3
strategic 127:8 144:17 146:14 163:14 strategies 35:18 strategy 56:13 84:6 116:20 stream 139:10 streams 188:22 Street 1:21 213:13 streets 202:3
strategic 127:8 144:17 146:14 163:14 strategies 35:18 strategy 56:13 84:6 116:20 stream 139:10 streams 188:22 Street 1:21 213:13 streets 202:3 strengthen 16:22 51:2 52:1 69:11 70:21 84:14
strategic 127:8 144:17 146:14 163:14 strategies 35:18 strategy 56:13 84:6 116:20 stream 139:10 streams 188:22 Street 1:21 213:13 streets 202:3 strengthen 16:22 51:2 52:1 69:11 70:21 84:14
strategic 127:8 144:17 146:14 163:14 strategies 35:18 strategy 56:13 84:6 116:20 stream 139:10 streams 188:22 Street 1:21 213:13 streets 202:3 strengthen 16:22 51:2 52:1 69:11 70:21 84:14 110:15 141:8 145:21 149:20
strategic 127:8 144:17 146:14 163:14 strategies 35:18 strategy 56:13 84:6 116:20 stream 139:10 streams 188:22 Street 1:21 213:13 streets 202:3 strengthen 16:22 51:2 52:1 69:11 70:21 84:14 110:15 141:8 145:21 149:20
strategic 127:8 144:17 146:14 163:14 strategies 35:18 strategy 56:13 84:6 116:20 stream 139:10 streams 188:22 Street 1:21 213:13 streets 202:3 strengthen 16:22 51:2 52:1 69:11 70:21 84:14 110:15 141:8 145:21 149:20 154:6 193:17 196:15 199:14
strategic 127:8 144:17 146:14 163:14 strategies 35:18 strategy 56:13 84:6 116:20 stream 139:10 streams 188:22 Street 1:21 213:13 streets 202:3 strengthen 16:22 51:2 52:1 69:11 70:21 84:14 110:15 141:8 145:21 149:20 154:6 193:17 196:15 199:14 217:5
strategic 127:8 144:17 146:14 163:14 strategies 35:18 strategy 56:13 84:6 116:20 stream 139:10 streams 188:22 Street 1:21 213:13 streets 202:3 strengthen 16:22 51:2 52:1 69:11 70:21 84:14 110:15 141:8 145:21 149:20 154:6 193:17 196:15 199:14 217:5 strengthening 159:12 206:15
strategic 127:8 144:17 146:14 163:14 strategies 35:18 strategy 56:13 84:6 116:20 stream 139:10 streams 188:22 Street 1:21 213:13 streets 202:3 strengthen 16:22 51:2 52:1 69:11 70:21 84:14 110:15 141:8 145:21 149:20 154:6 193:17 196:15 199:14 217:5 strengthening 159:12 206:15 208:19 244:3
strategic 127:8 144:17 146:14 163:14 strategies 35:18 strategy 56:13 84:6 116:20 stream 139:10 streams 188:22 Street 1:21 213:13 streets 202:3 strengthen 16:22 51:2 52:1 69:11 70:21 84:14 110:15 141:8 145:21 149:20 154:6 193:17 196:15 199:14 217:5 strengthening 159:12 206:15 208:19 244:3 276:15
strategic 127:8 144:17 146:14 163:14 strategies 35:18 strategy 56:13 84:6 116:20 stream 139:10 streams 188:22 Street 1:21 213:13 streets 202:3 strengthen 16:22 51:2 52:1 69:11 70:21 84:14 110:15 141:8 145:21 149:20 154:6 193:17 196:15 199:14 217:5 strengthening 159:12 206:15 208:19 244:3 276:15 stress 35:17
strategic 127:8 144:17 146:14 163:14 strategies 35:18 strategy 56:13 84:6 116:20 stream 139:10 streams 188:22 Street 1:21 213:13 streets 202:3 strengthen 16:22 51:2 52:1 69:11 70:21 84:14 110:15 141:8 145:21 149:20 154:6 193:17 196:15 199:14 217:5 strengthening 159:12 206:15 208:19 244:3 276:15 stress 35:17 strict 239:17, 19
strategic 127:8 144:17 146:14 163:14 strategies 35:18 strategy 56:13 84:6 116:20 stream 139:10 streams 188:22 Street 1:21 213:13 streets 202:3 strengthen 16:22 51:2 52:1 69:11 70:21 84:14 110:15 141:8 145:21 149:20 154:6 193:17 196:15 199:14 217:5 strengthening 159:12 206:15 208:19 244:3 276:15 stress 35:17 strict 239:17, 19
strategic 127:8 144:17 146:14 163:14 strategies 35:18 strategy 56:13 84:6 116:20 stream 139:10 streams 188:22 Street 1:21 213:13 streets 202:3 strengthen 16:22 51:2 52:1 69:11 70:21 84:14 110:15 141:8 145:21 149:20 154:6 193:17 196:15 199:14 217:5 strengthening 159:12 206:15 208:19 244:3 276:15 stress 35:17

strictest 105:11
108:21 255:12 strike 13:21
strike 13:21
stringency 50:17
51:5, 13 57:7
70:22 71:8 93: <i>1</i>
226:13 264:7
266:6
stringent 10: <i>15</i>
11:6 17:2 27:19
49:5 69:21 93:4
104:15 116:17
118:3 126:1
137: <i>19</i> 141: <i>15</i>
157:12 221:12
118:3 126:1 137:19 141:15 157:12 221:12 222:2 223:13
225:2 226:12
243:14 264:10
Strip 114: <i>17</i>
strokes 211:5
stroller 42:12
strong 10:22
strong 10:22 17:14 26:1 35:6
36:12 20 47:8
36:12, 20 47:8 55:2 73:15 74:2
75:3 78:7, 10
88:14, 17, 22 89:7
06.14, 17, 22 09.7
96:4 97:6, 9
113:16 140:15
145:3 146:2 147:4
151: <i>11</i> 154: <i>18</i>
158:22 163:8
167:9 180: <i>13</i>
190: <i>4</i> 195: <i>18</i>
199:7 200: <i>15</i>
206:17 207:2, 21 209:2 211:7 221:18 223:5 228:19 240:11
209:2 211:7
221:18 223:5
228:19 240:11
245: <i>18</i> 251: <i>1</i>
276:11 282:18, 21
285:12, 19
stronger 26:9
29:9 30:3, 14
69:21 71:13 74:22
82: <i>19</i> 100: <i>9</i> 120: <i>1</i> ,
7 141:9, 14 144:7
146.18 148.0
146:18 148:9 160:20 162:22 169:13 176:5 211:10 221:17
160.20 102.22
109:13 1/0:3
223:12 231:11
257:9 286:1
strongest 17:15
26:7 32:21 36:9
43:21 44:15 94:14
97:15 98:12 100:6
112:12 121:13
144:5 145: <i>16</i>
151:20 152:20, 22 154:16 160:14, 16
154·16 160·14 16

160.10 165.21
162: <i>19</i> 165: <i>21</i>
167:5 188:6 190:8
167:5 188:6 190:8 191:22 192:12 194:14 195:14 199:9 207:1 209:5 211:9 212:13 216:9 230:1 231:5 241:12 242:21 246:4 254:2
194: <i>14</i> 195: <i>14</i>
199.9 207.1 209.5
211.0 212.12
211:9 212:13
216:9 230:1 231:3
241: <i>12</i> 242:2 <i>1</i>
246:4 254:2
260:16 261:6
262:7, 15 267:9
202.7, 13 207.9
269:1, 11 283:17
284: <i>17</i>
strongly 22:22
45:21 75:9 127:11
158.12 222.2
158: <i>12</i> 222:2 226: <i>11</i> 274:2
226:11 274:2
2/6:14
structural 256:19
struggle 185:13
196:18 240:16
struggles 210:1
struggling 41:16
170: <i>13</i> 186:8
stuck 178:18
194:6 283:5
Studebaker 170:12
student 197:15
students 41:12
students 41:12 197:21 198:2
283:5
studied 202:15
studies 150:17
212:2 <i>1</i>
study 43:17 86:9
STURZA 5:8
stylish 86:7
stymied 28:22
Subaru 230:19
subject 10: <i>18</i>
38:10
submission 158:13
submit 12:22
13:10 73:17 128:1
13:10 /3:1/ 128:1
submitted 19:12
63:17
submitting 57:20
64:19 86:21 101:5
159:3
subsequent 118:2
subsequently 96:5
substance 35:11
substantial 11-11
substantial 11: <i>11</i> 47:9 56: <i>15</i> 125: <i>17</i>
47.9 30:13 123:17
243:18
substantially
Substantially
156: <i>11</i> 259:22
156:11 259:22
156: <i>11</i> 259:22 suburbia 114: <i>5</i>
156:11 259:22

succeed 41:13

success 56:15, 19 124:2 178:22 successful 111:9 sued 180:4 suffer 113:18 150:2, 5 151:6 208:3 275:6 suffered 45:10 162:9 245:7 suffering 47:6 48:6 211:3 274:7, 8 sufficient 12:1 24:19 38:18 160:12 suffocating 34:12 suggest 270:9 suggested 35:21 suicide 18:15 269:6 suing 261:11 summary 158:19 summer 18:8 81:21 91:18 92:3 113:22 188:11 194:1 195:11 200:14 245:7 256:1 summers 92:1 202:1 260:5 Sunbelt 144:11 sunlight 34:10 super 236:16 super-hero 237:7 superior 40:15 supervise 17:16 supplier 250:7 suppliers 54:20 125:7, 11, 12, 16 127:11, 16, 20 supply 59:16 64:9, 15 89:11 95:3 124:3 127:8 supplying 170:13 support 19:19 20:4 22:22 29:21 31:2 40:9 52:16 55:3, 18 56:22 59:17 69:5 73:14, 18 74:3 77:14 90:21 94:13 110:14 113:15 115:7 124:13 126:19 127:11, 20 131:8 137:5 138:14 147:15 149:19 159:12 168:2, 19 174:16 175:4 176:4, 8 191:4 193:16 195:19 201:19	
successful 111:9 sued 180:4 suffer 113:18 150:2, 5 151:6 208:3 275:6 suffered 45:10 162:9 245:7 suffering 47:6 48:6 211:3 274:7, 8 sufficient 12:1 24:19 38:18 160:12 suffocating 34:12 suggest 270:9 suggested 35:21 suicide 18:15 269:6 suing 261:11 summary 158:19 summer 18:8 81:21 91:18 92:3 113:22 188:11 194:1 195:11 200:14 245:7 256:1 summers 92:1 202:1 260:5 Sunbelt 144:11 sunlight 34:10 super 236:16 super-hero 237:7 superior 40:15 supervise 17:16 supplier 250:7 suppliers 54:20 125:7, 11, 12, 16 127:11, 16, 20 supply 59:16 64:9, 15 89:11 95:3 124:3 127:8 supply 190:21 15:7 124:13 110:14 113:15 115:7 124:13 110:14 113:15 115:7 124:13 110:14 113:15 115:7 124:13 110:14 113:15 115:7 124:13 126:19 127:11, 20 131:8 137:5 138:14 147:15 149:19 159:12 168:2, 19 174:16 175:4 176:4, 8 191:4 193:16	success 56:15 19
successful 111:9 sued 180:4 suffer 113:18 150:2, 5 151:6 208:3 275:6 suffered 45:10 162:9 245:7 suffering 47:6 48:6 211:3 274:7, 8 sufficient 12:1 24:19 38:18 160:12 suffocating 34:12 suggest 270:9 suggested 35:21 suicide 18:15 269:6 suing 261:11 summary 158:19 summer 18:8 81:21 91:18 92:3 113:22 188:11 194:1 195:11 200:14 245:7 256:1 summers 92:1 202:1 260:5 Sunbelt 144:11 sunlight 34:10 super 236:16 super-hero 237:7 superior 40:15 supervise 17:16 supplier 250:7 suppliers 54:20 125:7, 11, 12, 16 127:11, 16, 20 supply 59:16 64:9, 15 89:11 95:3 124:3 127:8 supply 190:21 15:7 124:13 110:14 113:15 115:7 124:13 110:14 113:15 115:7 124:13 110:14 113:15 115:7 124:13 110:14 113:15 115:7 124:13 126:19 127:11, 20 131:8 137:5 138:14 147:15 149:19 159:12 168:2, 19 174:16 175:4 176:4, 8 191:4 193:16	124:2 178:22
suffer 113:18 150:2, 5 151:6 208:3 275:6 suffered 45:10 162:9 245:7 suffering 47:6 48:6 211:3 274:7, 8 sufficient 12:1 24:19 38:18 160:12 suffocating 34:12 suggest 270:9 suggested 35:21 suicide 18:15 269:6 suing 261:11 summary 158:19 summer 18:8 81:21 91:18 92:3 113:22 188:11 194:1 195:11 200:14 245:7 256:1 summers 92:1 202:1 260:5 Sunbelt 144:11 sunlight 34:10 super 236:16 super-hero 237:7 superior 40:15 supervise 17:16 supplier 250:7 suppliers 54:20 125:7, 11, 12, 16 127:11, 16, 20 supply 59:16 64:9, 15 89:11 95:3 124:3 127:8 supplying 170:13 support 19:19 20:4 22:22 29:21 31:2 40:9 52:16 55:3, 18 56:22 59:17 69:5 73:14, 18 74:3 77:14 90:21 94:13 110:14 113:15 115:7 124:13 126:19 127:11, 20 131:8 137:5 138:14 147:15 149:19 159:12 168:2, 19 174:16 175:4 176:4, 8 191:4 193:16	
150:2, 5 151:6 208:3 275:6 suffered 45:10 162:9 245:7 suffering 47:6 48:6 211:3 274:7, 8 sufficient 12:1 24:19 38:18 160:12 suffocating 34:12 suggest 270:9 suggested 35:21 suicide 18:15 269:6 suing 261:11 summary 158:19 summer 18:8 81:21 91:18 92:3 113:22 188:11 194:1 195:11 200:14 245:7 256:1 summers 92:1 202:1 260:5 Sunbelt 144:11 sunlight 34:10 super 236:16 super-hero 237:7 superior 40:15 supervise 17:16 suppliers 54:20 125:7, 11, 12, 16 127:11, 16, 20 supply 59:16 64:9, 15 89:11 95:3 124:3 127:8 supply 59:16 64:9, 15 89:11 95:3 124:3 127:8 supply 170:13 support 19:19 20:4 22:22 29:21 31:2 40:9 52:16 55:3, 18 56:22 59:17 69:5 73:14, 18 74:3 77:14 90:21 94:13 110:14 113:15 115:7 124:13 126:19 127:11, 20 131:8 137:5 138:14 147:15 149:19 159:12 168:2, 19 174:16 175:4 176:4, 8 191:4 193:16	
208:3 275:6 suffered 45:10 162:9 245:7 suffering 47:6 48:6 211:3 274:7, 8 sufficient 12:1 24:19 38:18 160:12 suffocating 34:12 sugest 270:9 suggested 35:21 suicide 18:15 269:6 suing 261:11 summary 158:19 summer 18:8 81:21 91:18 92:3 113:22 188:11 194:1 195:11 200:14 245:7 256:1 summers 92:1 202:1 260:5 Sunbelt 144:11 sunlight 34:10 super 236:16 super-hero 237:7 superior 40:15 supervise 17:16 suppliers 54:20 125:7, 11, 12, 16 127:11, 16, 20 supply 59:16 64:9, 15 89:11 95:3 124:3 127:8 supplying 170:13 support 19:19 20:4 22:22 29:21 31:2 40:9 52:16 55:3, 18 56:22 59:17 69:5 73:14, 18 74:3 77:14 90:21 94:13 110:14 113:15 115:7 124:13 126:19 127:11, 20 131:8 137:5 138:14 147:15 149:19 159:12 168:2, 19 174:16 175:4 176:4, 8 191:4 193:16	
suffered 45:10 162:9 245:7 suffering 47:6 48:6 211:3 274:7, 8 sufficient 12:1 24:19 38:18 160:12 suffocating 34:12 suggest 270:9 suggested 35:21 suicide 18:15 269:6 suing 261:11 summary 158:19 summer 18:8 81:21 91:18 92:3 113:22 188:11 194:1 195:11 200:14 245:7 256:1 summers 92:1 202:1 260:5 Sunbelt 144:11 sunlight 34:10 super 236:16 super-hero 237:7 superior 40:15 superior 40:15 superior 54:20 125:7, 11, 12, 16 127:11, 16, 20 supply 59:16 64:9, 15 89:11 95:3 124:3 127:8 supplying 170:13 support 19:19 20:4 22:22 29:21 31:2 40:9 52:16 55:3, 18 56:22 59:17 69:5 73:14, 18 74:3 77:14 90:21 94:13 110:14 113:15 115:7 124:13 126:19 127:11, 20 131:8 137:5 138:14 147:15 149:19 159:12 168:2, 19 174:16 175:4 176:4, 8 191:4 193:16	150:2, 5 151:6
suffering 47:6 48:6 211:3 274:7, 8 sufficient 12:1 24:19 38:18 160:12 suffocating 34:12 suggest 270:9 suggested 35:21 suicide 18:15 269:6 suing 261:11 summary 158:19 summer 18:8 81:21 91:18 92:3 113:22 188:11 194:1 195:11 200:14 245:7 256:1 summers 92:1 202:1 260:5 Sunbelt 144:11 sunlight 34:10 super 236:16 super-hero 237:7 superior 40:15 superior 40:15 superior 54:20 125:7, 11, 12, 16 127:11, 16, 20 supply 59:16 64:9, 15 89:11 95:3 124:3 127:8 supplying 170:13 support 19:19 20:4 22:22 29:21 31:2 40:9 52:16 55:3, 18 56:22 59:17 69:5 73:14, 18 74:3 77:14 90:21 94:13 110:14 113:15 115:7 124:13 126:19 127:11, 20 131:8 137:5 138:14 147:15 149:19 159:12 168:2, 19 174:16 175:4 176:4, 8 191:4 193:16	
suffering 47:6 48:6 211:3 274:7, 8 sufficient 12:1 24:19 38:18 160:12 suffocating 34:12 suggest 270:9 suggested 35:21 suicide 18:15 269:6 suing 261:11 summary 158:19 summer 18:8 81:21 91:18 92:3 113:22 188:11 194:1 195:11 200:14 245:7 256:1 summers 92:1 202:1 260:5 Sunbelt 144:11 sunlight 34:10 super 236:16 super-hero 237:7 superior 40:15 supervise 17:16 supplier 250:7 suppliers 54:20 125:7, 11, 12, 16 127:11, 16, 20 supply 59:16 64:9, 15 89:11 95:3 124:3 127:8 supplying 170:13 support 19:19 20:4 22:22 29:21 31:2 40:9 52:16 55:3, 18 56:22 59:17 69:5 73:14, 18 74:3 77:14 90:21 94:13 110:14 113:15 115:7 124:13 126:19 127:11, 20 131:8 137:5 138:14 147:15 149:19 159:12 168:2, 19 174:16 175:4 176:4, 8 191:4 193:16	
48:6 211:3 274:7, 8 sufficient 12:1 24:19 38:18 160:12 suffocating 34:12 suggest 270:9 suggested 35:21 suicide 18:15 269:6 suing 261:11 summary 158:19 summer 18:8 81:21 91:18 92:3 113:22 188:11 194:1 195:11 200:14 245:7 256:1 summers 92:1 202:1 260:5 Sunbelt 144:11 sunlight 34:10 super 236:16 super-hero 237:7 superior 40:15 supervise 17:16 supplier 250:7 suppliers 54:20 125:7, 11, 12, 16 127:11, 16, 20 supply 59:16 64:9, 15 89:11 95:3 124:3 127:8 supplying 170:13 support 19:19 20:4 22:22 29:21 31:2 40:9 52:16 55:3, 18 56:22 59:17 69:5 73:14, 18 74:3 77:14 90:21 94:13 110:14 113:15 115:7 124:13 126:19 127:11, 20 131:8 137:5 138:14 147:15 149:19 159:12 168:2, 19 174:16 175:4 176:4, 8 191:4 193:16	
sufficient 12:1 24:19 38:18 160:12 suffocating 34:12 suggest 270:9 suggested 35:21 suicide 18:15 269:6 suing 261:11 summary 158:19 summer 18:8 81:21 91:18 92:3 113:22 188:11 194:1 195:11 200:14 245:7 256:1 summers 92:1 202:1 260:5 Sunbelt 144:11 sunlight 34:10 super 236:16 super-hero 237:7 superior 40:15 supervise 17:16 supplier 250:7 suppliers 54:20 125:7, 11, 12, 16 127:11, 16, 20 supply 59:16 64:9, 15 89:11 95:3 124:3 127:8 supplying 170:13 support 19:19 20:4 22:22 29:21 31:2 40:9 52:16 55:3, 18 56:22 59:17 69:5 73:14, 18 74:3 77:14 90:21 94:13 110:14 113:15 115:7 124:13 126:19 127:11, 20 131:8 137:5 138:14 147:15 149:19 159:12 168:2, 19 174:16 175:4 176:4, 8 191:4 193:16	48.6 211.3 274.7
sufficient 12:1 24:19 38:18 160:12 suffocating 34:12 suggest 270:9 suggested 35:21 suicide 18:15 269:6 suing 261:11 summary 158:19 summer 18:8 81:21 91:18 92:3 113:22 188:11 194:1 195:11 200:14 245:7 256:1 summers 92:1 202:1 260:5 Sunbelt 144:11 sunlight 34:10 super 236:16 super-hero 237:7 superior 40:15 supervise 17:16 supplier 250:7 suppliers 54:20 125:7, 11, 12, 16 127:11, 16, 20 supply 59:16 64:9, 15 89:11 95:3 124:3 127:8 supplying 170:13 support 19:19 20:4 22:22 29:21 31:2 40:9 52:16 55:3, 18 56:22 59:17 69:5 73:14, 18 74:3 77:14 90:21 94:13 110:14 113:15 115:7 124:13 126:19 127:11, 20 131:8 137:5 138:14 147:15 149:19 159:12 168:2, 19 174:16 175:4 176:4, 8 191:4 193:16	
24:19 38:18 160:12 suffocating 34:12 suggest 270:9 suggested 35:21 suicide 18:15 269:6 suing 261:11 summary 158:19 summer 18:8 81:21 91:18 92:3 113:22 188:11 194:1 195:11 200:14 245:7 256:1 summers 92:1 202:1 260:5 Sunbelt 144:11 sunlight 34:10 super 236:16 super-hero 237:7 superior 40:15 supervise 17:16 suppliers 54:20 125:7, 11, 12, 16 127:11, 16, 20 supply 59:16 64:9, 15 89:11 95:3 124:3 127:8 supplying 170:13 support 19:19 20:4 22:22 29:21 31:2 40:9 52:16 55:3, 18 56:22 59:17 69:5 73:14, 18 74:3 77:14 90:21 94:13 110:14 113:15 115:7 124:13 126:19 127:11, 20 131:8 137:5 138:14 147:15 149:19 159:12 168:2, 19 174:16 175:4 176:4, 8 191:4 193:16	
suffocating 34:12 suggest 270:9 suggested 35:21 suicide 18:15 269:6 suing 261:11 summary 158:19 summer 18:8 81:21 91:18 92:3 113:22 188:11 194:1 195:11 200:14 245:7 256:1 summers 92:1 202:1 260:5 Sunbelt 144:11 sunlight 34:10 super 236:16 super-hero 237:7 superior 40:15 supervise 17:16 suppliers 54:20 125:7, 11, 12, 16 127:11, 16, 20 supply 59:16 64:9, 15 89:11 95:3 124:3 127:8 supplying 170:13 support 19:19 20:4 22:22 29:21 31:2 40:9 52:16 55:3, 18 56:22 59:17 69:5 73:14, 18 74:3 77:14 90:21 94:13 110:14 113:15 115:7 124:13 126:19 127:11, 20 131:8 137:5 138:14 147:15 149:19 159:12 168:2, 19 174:16 175:4 176:4, 8 191:4 193:16	
suggest 270:9 suggested 35:21 suicide 18:15 269:6 suing 261:11 summary 158:19 summer 18:8 81:21 91:18 92:3 113:22 188:11 194:1 195:11 200:14 245:7 256:1 summers 92:1 202:1 260:5 Sunbelt 144:11 sunlight 34:10 super 236:16 super-hero 237:7 superior 40:15 supervise 17:16 suppliers 54:20 125:7, 11, 12, 16 127:11, 16, 20 supply 59:16 64:9, 15 89:11 95:3 124:3 127:8 supplying 170:13 support 19:19 20:4 22:22 29:21 31:2 40:9 52:16 55:3, 18 56:22 59:17 69:5 73:14, 18 74:3 77:14 90:21 94:13 110:14 113:15 115:7 124:13 126:19 127:11, 20 131:8 137:5 138:14 147:15 149:19 159:12 168:2, 19 174:16 175:4 176:4, 8 191:4 193:16	
suggested 35:21 suicide 18:15 269:6 suing 261:11 summary 158:19 summer 18:8 81:21 91:18 92:3 113:22 188:11 194:1 195:11 200:14 245:7 256:1 summers 92:1 202:1 260:5 Sunbelt 144:11 sunlight 34:10 super 236:16 super-hero 237:7 superior 40:15 superior 40:15 superior 54:20 125:7, 11, 12, 16 127:11, 16, 20 supply 59:16 64:9, 15 89:11 95:3 124:3 127:8 supplying 170:13 support 19:19 20:4 22:22 29:21 31:2 40:9 52:16 55:3, 18 56:22 59:17 69:5 73:14, 18 74:3 77:14 90:21 94:13 110:14 113:15 115:7 124:13 126:19 127:11, 20 131:8 137:5 138:14 147:15 149:19 159:12 168:2, 19 174:16 175:4 176:4, 8 191:4 193:16	
suicide 18:15 269:6 suing 261:11 summary 158:19 summer 18:8 81:21 91:18 92:3 113:22 188:11 194:1 195:11 200:14 245:7 256:1 summers 92:1 202:1 260:5 Sunbelt 144:11 sunlight 34:10 super 236:16 super-hero 237:7 superior 40:15 supervise 17:16 supplier 250:7 suppliers 54:20 125:7, 11, 12, 16 127:11, 16, 20 supply 59:16 64:9, 15 89:11 95:3 124:3 127:8 supplying 170:13 support 19:19 20:4 22:22 29:21 31:2 40:9 52:16 55:3, 18 56:22 59:17 69:5 73:14, 18 74:3 77:14 90:21 94:13 110:14 113:15 115:7 124:13 126:19 127:11, 20 131:8 137:5 138:14 147:15 149:19 159:12 168:2, 19 174:16 175:4 176:4, 8 191:4 193:16	
269:6 suing 261:11 summary 158:19 summer 18:8 81:21 91:18 92:3 113:22 188:11 194:1 195:11 200:14 245:7 256:1 summers 92:1 202:1 260:5 Sunbelt 144:11 sunlight 34:10 super 236:16 super-hero 237:7 superior 40:15 supervise 17:16 supplier 250:7 suppliers 54:20 125:7, 11, 12, 16 127:11, 16, 20 supply 59:16 64:9, 15 89:11 95:3 124:3 127:8 supplying 170:13 support 19:19 20:4 22:22 29:21 31:2 40:9 52:16 55:3, 18 56:22 59:17 69:5 73:14, 18 74:3 77:14 90:21 94:13 110:14 113:15 115:7 124:13 126:19 127:11, 20 131:8 137:5 138:14 147:15 149:19 159:12 168:2, 19 174:16 175:4 176:4, 8 191:4 193:16	suggested 35:21
suing 261:11 summary 158:19 summer 18:8 81:21 91:18 92:3 113:22 188:11 194:1 195:11 200:14 245:7 256:1 summers 92:1 202:1 260:5 Sunbelt 144:11 sunlight 34:10 super 236:16 super-hero 237:7 superior 40:15 supervise 17:16 supplier 250:7 suppliers 54:20 125:7, 11, 12, 16 127:11, 16, 20 supply 59:16 64:9, 15 89:11 95:3 124:3 127:8 supplying 170:13 support 19:19 20:4 22:22 29:21 31:2 40:9 52:16 55:3, 18 56:22 59:17 69:5 73:14, 18 74:3 77:14 90:21 94:13 110:14 113:15 115:7 124:13 126:19 127:11, 20 131:8 137:5 138:14 147:15 149:19 159:12 168:2, 19 174:16 175:4 176:4, 8 191:4 193:16	
summary 158:19 summer 18:8 81:21 91:18 92:3 113:22 188:11 194:1 195:11 200:14 245:7 256:1 summers 92:1 202:1 260:5 Sunbelt 144:11 sunlight 34:10 super 236:16 super-hero 237:7 superior 40:15 supervise 17:16 supplier 250:7 suppliers 54:20 125:7, 11, 12, 16 127:11, 16, 20 supply 59:16 64:9, 15 89:11 95:3 124:3 127:8 supplying 170:13 support 19:19 20:4 22:22 29:21 31:2 40:9 52:16 55:3, 18 56:22 59:17 69:5 73:14, 18 74:3 77:14 90:21 94:13 110:14 113:15 115:7 124:13 126:19 127:11, 20 131:8 137:5 138:14 147:15 149:19 159:12 168:2, 19 174:16 175:4 176:4, 8 191:4 193:16	
summer 18:8 81:21 91:18 92:3 113:22 188:11 194:1 195:11 200:14 245:7 256:1 summers 92:1 202:1 260:5 Sunbelt 144:11 sunlight 34:10 super 236:16 super-hero 237:7 superior 40:15 supervise 17:16 supplier 250:7 suppliers 54:20 125:7, 11, 12, 16 127:11, 16, 20 supply 59:16 64:9, 15 89:11 95:3 124:3 127:8 supplying 170:13 support 19:19 20:4 22:22 29:21 31:2 40:9 52:16 55:3, 18 56:22 59:17 69:5 73:14, 18 74:3 77:14 90:21 94:13 110:14 113:15 115:7 124:13 126:19 127:11, 20 131:8 137:5 138:14 147:15 149:19 159:12 168:2, 19 174:16 175:4 176:4, 8 191:4 193:16	
81:21 91:18 92:3 113:22 188:11 194:1 195:11 200:14 245:7 256:1 summers 92:1 202:1 260:5 Sunbelt 144:11 sunlight 34:10 super 236:16 super-hero 237:7 superior 40:15 supervise 17:16 supplier 250:7 suppliers 54:20 125:7, 11, 12, 16 127:11, 16, 20 supply 59:16 64:9, 15 89:11 95:3 124:3 127:8 supplying 170:13 support 19:19 20:4 22:22 29:21 31:2 40:9 52:16 55:3, 18 56:22 59:17 69:5 73:14, 18 74:3 77:14 90:21 94:13 110:14 113:15 115:7 124:13 126:19 127:11, 20 131:8 137:5 138:14 147:15 149:19 159:12 168:2, 19 174:16 175:4 176:4, 8 191:4 193:16	summer 18:8
113:22 188:11 194:1 195:11 200:14 245:7 256:1 summers 92:1 202:1 260:5 Sunbelt 144:11 sunlight 34:10 super 236:16 super-hero 237:7 superior 40:15 superior 40:15 superliers 54:20 125:7, 11, 12, 16 127:11, 16, 20 supply 59:16 64:9, 15 89:11 95:3 124:3 127:8 supplying 170:13 support 19:19 20:4 22:22 29:21 31:2 40:9 52:16 55:3, 18 56:22 59:17 69:5 73:14, 18 74:3 77:14 90:21 94:13 110:14 113:15 115:7 124:13 126:19 127:11, 20 131:8 137:5 138:14 147:15 149:19 159:12 168:2, 19 174:16 175:4 176:4, 8 191:4 193:16	81:2 <i>1</i> 91: <i>1</i> 8 92: <i>3</i>
194:1 195:11 200:14 245:7 256:1 summers 92:1 202:1 260:5 Sunbelt 144:11 sunlight 34:10 super 236:16 super-hero 237:7 superior 40:15 supervise 17:16 supplier 250:7 suppliers 54:20 125:7, 11, 12, 16 127:11, 16, 20 supply 59:16 64:9, 15 89:11 95:3 124:3 127:8 supplying 170:13 support 19:19 20:4 22:22 29:21 31:2 40:9 52:16 55:3, 18 56:22 59:17 69:5 73:14, 18 74:3 77:14 90:21 94:13 110:14 113:15 115:7 124:13 126:19 127:11, 20 131:8 137:5 138:14 147:15 149:19 159:12 168:2, 19 174:16 175:4 176:4, 8 191:4 193:16	113:22 188: <i>11</i>
256:1 summers 92:1 202:1 260:5 Sunbelt 144:11 sunlight 34:10 super 236:16 super-hero 237:7 superior 40:15 supervise 17:16 supplier 250:7 suppliers 54:20 125:7, 11, 12, 16 127:11, 16, 20 supply 59:16 64:9, 15 89:11 95:3 124:3 127:8 supplying 170:13 support 19:19 20:4 22:22 29:21 31:2 40:9 52:16 55:3, 18 56:22 59:17 69:5 73:14, 18 74:3 77:14 90:21 94:13 110:14 113:15 115:7 124:13 126:19 127:11, 20 131:8 137:5 138:14 147:15 149:19 159:12 168:2, 19 174:16 175:4 176:4, 8 191:4 193:16	194: <i>1</i> 195: <i>11</i>
summers 92:1 202:1 260:5 Sunbelt 144:11 sunlight 34:10 super 236:16 super-hero 237:7 superior 40:15 supervise 17:16 supplier 250:7 suppliers 54:20 125:7, 11, 12, 16 127:11, 16, 20 supply 59:16 64:9, 15 89:11 95:3 124:3 127:8 supplying 170:13 support 19:19 20:4 22:22 29:21 31:2 40:9 52:16 55:3, 18 56:22 59:17 69:5 73:14, 18 74:3 77:14 90:21 94:13 110:14 113:15 115:7 124:13 126:19 127:11, 20 131:8 137:5 138:14 147:15 149:19 159:12 168:2, 19 174:16 175:4 176:4, 8 191:4 193:16	
202:1 260:5 Sunbelt 144:11 sunlight 34:10 super 236:16 super-hero 237:7 superior 40:15 supervise 17:16 supplier 250:7 suppliers 54:20 125:7, 11, 12, 16 127:11, 16, 20 supply 59:16 64:9, 15 89:11 95:3 124:3 127:8 supplying 170:13 support 19:19 20:4 22:22 29:21 31:2 40:9 52:16 55:3, 18 56:22 59:17 69:5 73:14, 18 74:3 77:14 90:21 94:13 110:14 113:15 115:7 124:13 126:19 127:11, 20 131:8 137:5 138:14 147:15 149:19 159:12 168:2, 19 174:16 175:4 176:4, 8 191:4 193:16	
Sunbelt 144:11 sunlight 34:10 super 236:16 super-hero 237:7 superior 40:15 supervise 17:16 supplier 250:7 suppliers 54:20 125:7, 11, 12, 16 127:11, 16, 20 supply 59:16 64:9, 15 89:11 95:3 124:3 127:8 supplying 170:13 support 19:19 20:4 22:22 29:21 31:2 40:9 52:16 55:3, 18 56:22 59:17 69:5 73:14, 18 74:3 77:14 90:21 94:13 110:14 113:15 115:7 124:13 126:19 127:11, 20 131:8 137:5 138:14 147:15 149:19 159:12 168:2, 19 174:16 175:4 176:4, 8 191:4 193:16	
sunlight 34:10 super 236:16 super-hero 237:7 superior 40:15 supervise 17:16 supplier 250:7 suppliers 54:20 125:7, 11, 12, 16 127:11, 16, 20 supply 59:16 64:9, 15 89:11 95:3 124:3 127:8 supplying 170:13 support 19:19 20:4 22:22 29:21 31:2 40:9 52:16 55:3, 18 56:22 59:17 69:5 73:14, 18 74:3 77:14 90:21 94:13 110:14 113:15 115:7 124:13 126:19 127:11, 20 131:8 137:5 138:14 147:15 149:19 159:12 168:2, 19 174:16 175:4 176:4, 8 191:4 193:16	
super 236:16 super-hero 237:7 superior 40:15 supervise 17:16 supplier 250:7 suppliers 54:20 125:7, 11, 12, 16 127:11, 16, 20 supply 59:16 64:9, 15 89:11 95:3 124:3 127:8 supplying 170:13 support 19:19 20:4 22:22 29:21 31:2 40:9 52:16 55:3, 18 56:22 59:17 69:5 73:14, 18 74:3 77:14 90:21 94:13 110:14 113:15 115:7 124:13 126:19 127:11, 20 131:8 137:5 138:14 147:15 149:19 159:12 168:2, 19 174:16 175:4 176:4, 8 191:4 193:16	
super-hero 237:7 superior 40:15 supervise 17:16 supplier 250:7 suppliers 54:20 125:7, 11, 12, 16 127:11, 16, 20 supply 59:16 64:9, 15 89:11 95:3 124:3 127:8 supplying 170:13 support 19:19 20:4 22:22 29:21 31:2 40:9 52:16 55:3, 18 56:22 59:17 69:5 73:14, 18 74:3 77:14 90:21 94:13 110:14 113:15 115:7 124:13 126:19 127:11, 20 131:8 137:5 138:14 147:15 149:19 159:12 168:2, 19 174:16 175:4 176:4, 8 191:4 193:16	_
supervise 17:16 supplier 250:7 suppliers 54:20 125:7, 11, 12, 16 127:11, 16, 20 supply 59:16 64:9, 15 89:11 95:3 124:3 127:8 supplying 170:13 support 19:19 20:4 22:22 29:21 31:2 40:9 52:16 55:3, 18 56:22 59:17 69:5 73:14, 18 74:3 77:14 90:21 94:13 110:14 113:15 115:7 124:13 126:19 127:11, 20 131:8 137:5 138:14 147:15 149:19 159:12 168:2, 19 174:16 175:4 176:4, 8 191:4 193:16	
supplier 250:7 suppliers 54:20 125:7, 11, 12, 16 127:11, 16, 20 supply 59:16 64:9, 15 89:11 95:3 124:3 127:8 supplying 170:13 support 19:19 20:4 22:22 29:21 31:2 40:9 52:16 55:3, 18 56:22 59:17 69:5 73:14, 18 74:3 77:14 90:21 94:13 110:14 113:15 115:7 124:13 126:19 127:11, 20 131:8 137:5 138:14 147:15 149:19 159:12 168:2, 19 174:16 175:4 176:4, 8 191:4 193:16	superior 40:15
supplier 250:7 suppliers 54:20 125:7, 11, 12, 16 127:11, 16, 20 supply 59:16 64:9, 15 89:11 95:3 124:3 127:8 supplying 170:13 support 19:19 20:4 22:22 29:21 31:2 40:9 52:16 55:3, 18 56:22 59:17 69:5 73:14, 18 74:3 77:14 90:21 94:13 110:14 113:15 115:7 124:13 126:19 127:11, 20 131:8 137:5 138:14 147:15 149:19 159:12 168:2, 19 174:16 175:4 176:4, 8 191:4 193:16	supervise 17:16
127:11, 16, 20 supply 59:16 64:9, 15 89:11 95:3 124:3 127:8 supplying 170:13 support 19:19 20:4 22:22 29:21 31:2 40:9 52:16 55:3, 18 56:22 59:17 69:5 73:14, 18 74:3 77:14 90:21 94:13 110:14 113:15 115:7 124:13 126:19 127:11, 20 131:8 137:5 138:14 147:15 149:19 159:12 168:2, 19 174:16 175:4 176:4, 8 191:4 193:16	supplier 250:7
127:11, 16, 20 supply 59:16 64:9, 15 89:11 95:3 124:3 127:8 supplying 170:13 support 19:19 20:4 22:22 29:21 31:2 40:9 52:16 55:3, 18 56:22 59:17 69:5 73:14, 18 74:3 77:14 90:21 94:13 110:14 113:15 115:7 124:13 126:19 127:11, 20 131:8 137:5 138:14 147:15 149:19 159:12 168:2, 19 174:16 175:4 176:4, 8 191:4 193:16	suppliers 54:20
supply 59:16 64:9, 15 89:11 95:3 124:3 127:8 supplying 170:13 support 19:19 20:4 22:22 29:21 31:2 40:9 52:16 55:3, 18 56:22 59:17 69:5 73:14, 18 74:3 77:14 90:21 94:13 110:14 113:15 115:7 124:13 126:19 127:11, 20 131:8 137:5 138:14 147:15 149:19 159:12 168:2, 19 174:16 175:4 176:4, 8 191:4 193:16	125:7, 11, 12, 16
15 89:11 95:3 124:3 127:8 supplying 170:13 support 19:19 20:4 22:22 29:21 31:2 40:9 52:16 55:3, 18 56:22 59:17 69:5 73:14, 18 74:3 77:14 90:21 94:13 110:14 113:15 115:7 124:13 126:19 127:11, 20 131:8 137:5 138:14 147:15 149:19 159:12 168:2, 19 174:16 175:4 176:4, 8 191:4 193:16	
124:3 127:8 supplying 170:13 support 19:19 20:4 22:22 29:21 31:2 40:9 52:16 55:3, 18 56:22 59:17 69:5 73:14, 18 74:3 77:14 90:21 94:13 110:14 113:15 115:7 124:13 126:19 127:11, 20 131:8 137:5 138:14 147:15 149:19 159:12 168:2, 19 174:16 175:4 176:4, 8 191:4 193:16	
supplying 170:13 support 19:19 20:4 22:22 29:21 31:2 40:9 52:16 55:3, 18 56:22 59:17 69:5 73:14, 18 74:3 77:14 90:21 94:13 110:14 113:15 115:7 124:13 126:19 127:11, 20 131:8 137:5 138:14 147:15 149:19 159:12 168:2, 19 174:16 175:4 176:4, 8 191:4 193:16	
support 19:19 20:4 22:22 29:21 31:2 40:9 52:16 55:3, 18 56:22 59:17 69:5 73:14, 18 74:3 77:14 90:21 94:13 110:14 113:15 115:7 124:13 126:19 127:11, 20 131:8 137:5 138:14 147:15 149:19 159:12 168:2, 19 174:16 175:4 176:4, 8 191:4 193:16	
20:4 22:22 29:21 31:2 40:9 52:16 55:3, 18 56:22 59:17 69:5 73:14, 18 74:3 77:14 90:21 94:13 110:14 113:15 115:7 124:13 126:19 127:11, 20 131:8 137:5 138:14 147:15 149:19 159:12 168:2, 19 174:16 175:4 176:4, 8 191:4 193:16	
31:2 40:9 52:16 55:3, 18 56:22 59:17 69:5 73:14, 18 74:3 77:14 90:21 94:13 110:14 113:15 115:7 124:13 126:19 127:11, 20 131:8 137:5 138:14 147:15 149:19 159:12 168:2, 19 174:16 175:4 176:4, 8 191:4 193:16	20:4 22:22 29:21
59:17 69:5 73:14, 18 74:3 77:14 90:21 94:13 110:14 113:15 115:7 124:13 126:19 127:11, 20 131:8 137:5 138:14 147:15 149:19 159:12 168:2, 19 174:16 175:4 176:4, 8 191:4 193:16	31:2 40:9 52:16
18 74:3 77:14 90:21 94:13 110:14 113:15 115:7 124:13 126:19 127:11, 20 131:8 137:5 138:14 147:15 149:19 159:12 168:2, 19 174:16 175:4 176:4, 8 191:4 193:16	
90:21 94:13 110:14 113:15 115:7 124:13 126:19 127:11, 20 131:8 137:5 138:14 147:15 149:19 159:12 168:2, 19 174:16 175:4 176:4, 8 191:4 193:16	59:17 69:5 73:14,
110:14 113:15 115:7 124:13 126:19 127:11, 20 131:8 137:5 138:14 147:15 149:19 159:12 168:2, 19 174:16 175:4 176:4, 8 191:4 193:16	
115:7 124:13 126:19 127:11, 20 131:8 137:5 138:14 147:15 149:19 159:12 168:2, 19 174:16 175:4 176:4, 8 191:4 193:16	90:21 94:13
126:19 127:11, 20 131:8 137:5 138:14 147:15 149:19 159:12 168:2, 19 174:16 175:4 176:4, 8 191:4 193:16	110.14 115.15
131:8 137:5 138:14 147:15 149:19 159:12 168:2, 19 174:16 175:4 176:4, 8 191:4 193:16	
138:14 147:15 149:19 159:12 168:2, 19 174:16 175:4 176:4, 8 191:4 193:16	131:8 137:5
149: <i>19</i> 159: <i>12</i> 168: <i>2</i> , <i>19</i> 174: <i>16</i> 175: <i>4</i> 176: <i>4</i> , 8 191: <i>4</i> 193: <i>16</i>	
168:2, <i>19</i> 174: <i>16</i> 175: <i>4</i> 176: <i>4</i> , 8 191: <i>4</i> 193: <i>16</i>	
191: <i>4</i> 193: <i>16</i>	168:2, <i>19</i> 174: <i>16</i>
195: <i>19</i> 201: <i>19</i>	
	195:19 201:19

206:14 209:22
210:2 215: <i>19</i> 276: <i>14</i> 277: <i>14</i>
279:5, 18
supported 175: <i>13</i> , <i>19</i> 176: <i>12</i> 211:2
243:22
supporters 258:2
supporting 61:7
89:2 95: <i>3</i> 123:2
209:20
supportive 157:16
supports 122: <i>12</i>
125:22 126:4. 10
147: <i>14</i> 158: <i>1</i>
147: <i>14</i> 158: <i>1</i> 217: <i>5</i> 243:20
266:4
supposed 240:6
supremely 172:5
sure 38:18 67:6
80:8 186:11
194: <i>12</i> , <i>17</i> 279: <i>14</i>
surely 194:8
surface 34:4, 10
surpassed 239:15
surprise 92:7
275: <i>1</i>
survey 140: <i>13</i> 174: <i>18</i> 175:2 176: <i>3</i> 197: <i>5</i>
174:18 175:2
176:3 197:5
surveys 173:20
174:5, 6
survive 41:16
106:7 203:9
survived 237:12 survivor 237:9
susceptible 109:13
275:9
SUSIE 5:17 173:6
177:4
Sustainability
140:5 146:10, 13
149:3
sustainable 85:1
129:20 130:15
132:5
sustains 83:5
SUV 23:12 253:20
SUVs 28:3 30:4
31:13 74:1 86:13
123:6 161:20
31:13 74:1 86:13 123:6 161:20 176:6 207:14
234:10 254:9
SUZANNE 7:3
249:6
swept 151:4 229:4 swift 20:4 59:17
90:22 152: <i>15</i> swiftly 95: <i>12</i>
112:9 217:9
219:10
217.10

switch 20:13 226:17
system 79:12
85: <i>19</i> 150: <i>1</i> 181: <i>13</i> 185: <i>16</i>
181: <i>13</i> 185: <i>10</i> 195: <i>9</i> 197: <i>13</i>
235:14 268:16
systemic 171:11
systems 79: <i>16</i>
165:20 257:5
270:16 276:6
< T >
table 40:12 250:14
table 40:12 250:14 tackle 27:15
28:16 95:15 153:2
186: <i>3</i> tackles 63:20
tackling 112:10
153:22 188:3
252:2 <i>1</i> 284:14
Tacoma 201:13
tactic 281: <i>1</i> Tad 9: <i>1</i>
Tafoya 179:12, 17,
19
tailpipe 57:4 81:8
99: <i>11, 14</i> 167:2
218: <i>12</i> 219: <i>1</i> TAISIA 5:8 161: <i>4</i> ,
11 11 11.4,
take 14:21 26:7
31:8 33:17 35:3
36:8 40: <i>11</i> 43: <i>4</i>
48:7 50:15 58:1 60:4 62:19 118:19
121:10 127:16
121: <i>10</i> 127: <i>16</i> 130:22 132:20 134: <i>13</i> 137:8
134: <i>13</i> 137:8
146:3 149:6 158:7
176: <i>16</i> , <i>20</i> 185: <i>10</i> 190: <i>4</i> 195: <i>2</i>
202:19, 22 207:2
209:4 211:7
212:15 226:8
237:12 246:19
251: <i>11</i> 258:2 <i>1</i> 267:6 268:13 14
272:17, 21 273:7
267:6 268:13, 14 272:17, 21 273:7 290:8, 21 291:3 take-away 233:14
take-away 233:14
taken 19: <i>3</i> 20: <i>19</i> 52: <i>19</i> 112: <i>9</i>
125:16 148:8
151:12 206:17
takes 46:20 68:13
114:16 148:5
209:2 269:5 talk 81:19 180:22
187:20 191:2 <i>1</i>

281:16 283:10
284:2 <i>1</i>
talked 283:11 talking 191:15
259:20 283:9
Tallahassee 44:12
TANAKA 5:5
155: <i>14</i> , <i>17</i> taping 189: <i>15</i>
TAR 66:1 105:4,
20
target 71:5 93:1 142:16 157:12
targeted 171:13
targets 17:14
85:10 86:20 92:17
97: <i>10</i> 160: <i>10</i> 264: <i>3</i> 269: <i>12</i>
278:20 279:9
task 12:1 54:8
103:19
taught 201:16 tax 60:2, 4 179:1,
2 180:16
taxes 120:21
taxpayers 241:19 teacher 41:7
197:21 199:13
202:15 221:5
Technical 4:11
10: <i>13</i> , 22 11:9 15: <i>19</i> 37: <i>12</i> 58: <i>18</i>
76.0 70.5 05.14
102:12 122:10 128:17 135:20 138:7 139:3 164:12 183:18 205:19 220:16 232:7 241:14
128:17 135:20
138:/ 139:3 164:12 183:18
205:19 220:16
232:7 241:14
248.3 287.19
289:2 technically 172:5
technician 161:13
technological
10:10 26:2 technologies 10:12 13:7 20:10 29:20 49:17, 20 57:18 70:15, 20 74:5 89:6 125:14 126:6
13:7 20:10 29:20
49:17, 20 57:18
70:15, 20 74:5
89:6 125:14 126:6, 7, 9, 13 127:2, 18
130:21 148:1, 6
157: <i>3</i> 166: <i>15</i>
172: <i>13</i> 218:2 251: <i>16</i> 265: <i>5</i> , <i>11</i>
266:3 270:10
technology 21:2, 7
36:16 50:11 54:20
70:12 71:3 89·12
technology 21:2, 7 36:16 50:11 54:20 66:17, 21 68:7 70:12 71:3 89:12 95:8 109:2 123:11,

<i>16</i> 125: <i>19</i> 126:8,
<i>10, 13</i> 139: <i>4</i>
169:20 172:8 179:7 185:2 <i>I</i>
179:7 185:2 <i>1</i>
251:3 270:17, 20
278:22 279:3, 6, 12 technology-neutral
66: <i>13</i>
teen-aged 227:22
teens 269:9
teeth 104:21
telephone 15:17
37:10 58:11 76:2
102:3 128:10
102:5 128:10 135:13 164:5 183:16 205:12
231:22 247:18
tell 24:14 198:6
201:5 242:14
telling 78:21
208:12
tells 143:13
temperature 113:20 188:18
194:2, 3 210:20
225:17
temperatures
34: <i>11</i> , <i>13</i> 81: <i>18</i> 91: <i>13</i> , <i>19</i> 114: <i>1</i>
91:13, 19 114:1
194: <i>7</i> 199: <i>3</i> 210: <i>17</i> 211: <i>4</i>
210:17 211:4 260:3
tend 202:16 228:5
Tennessee 108:17
tens 143:17
tense 81:20
tentative 14:18
tenure 106:1 term 121:11
126: <i>17</i>
terms 96:14 186:6
208: <i>1</i> 280:20
281:5
terrible 197:14
terribly 239:1
terrified 191:7, 19, 22
terrifies 192:2
terrifying 34:22
territories 116:3
TERRY 5:21 181:20 211:15, 20
181:20 211:15, 20
TERWILLIGER
2: <i>13</i> 31: <i>18</i> , <i>21</i> 32: <i>1</i>
Tesla 39:8 85:3
264:11, 20 266:2
test 138:2
testified 134: <i>14</i>
180: <i>15</i>

testifiers 48:20 246:18, 22 273:3 **testify** 15:14, 18 22:18 31:22 37:7, 11 51:21 52:19 58:8, 12 59:13 75:21 76:3 87:13 90:20 97:20 102:2, 6 113:6 128:7, 11 135:10, 14 137:4 139:9 149:1, 13 152:8 155:5 156:*1* 159:2 161:2 164:2, 6 165:4 167:19 179:10 183:14, 17 190:17 193:4 205:9, 13 209:13 211:13 217:4 226:19 229:20 231:19 232:1 241:6 247:16, 19 248:18 258:3 266:13 289:18 290:9, 22 testifying 19:20 22:21 115:19 144:3 159:9 238:5 267:2 testimony 9:6 13:8, 12 14:7, 10, 13 16:2, 5, 6 20:1 32:5, 7 38:10 73:12 81:6 98:15 101:4 116:7 134:18 136:4, 7, 8 196:10 199:22 220:21 230:5 237:22 270:2 277:22 287:14 288:2, 20 290:1, 5, 14, 18 Texas 38:13 39:11 40:1 72:15 73:6 161:12, 21, 22 162:2 175:20 184:*19* 185:*1* 233:8 234:8 thank 8:15 15:6 16:21 19:11, 14 22:1, 3, 17 26:12, 14 27:12 31:16, 17, 21 33:17, 18, 22 37:1, 2 38:9 40:19, 20 41:5 44:6, 7 48:11, 12 51:21 52:4, 12, 19 54:10, 11 57:19 58:3 59:12, 13 60:9, 10 64:18, 20, 21 65:4 68:15, 16, 21 71:17, 18 75:12, 15, 16

80:14, 15 81:6 83:21, 22 87:1, 2, 13 90:11, 12, 16, 19 93:10, 12 94:12 97:19 98:1 101:1, 4, 12, 14, 17, 18, 19 103:5 106:10 110:2, *3* 112:20, 21 113:5 115:10, 11, 15 118:7, 8, 17 121:17 124:22 125:*1* 127:22 128:2 132:6, 7, 19, 21 133:7 134:12, *14*, *22* 135:*1* 136:18 137:5 139:9, 12 140:2 142:19, 20 143:2 146:4, 5 149:6, 7 152:3, 7 155:5, 6 156:1 159:2, 4 161:2, 3 163:18, 19 164:2*1* 165:*3* 167:7, 13, 14, 18 170:2, 3 172:17, 18 173:13 177:1, 2 179:9, 11 181:16, *17* 184:2*1* 187:*1*, 2 190:17, 18 191:2 192:*17*, *18* 193:*1*, *4* 195:16, 17, 20, 21 196:10 199:22 200:2 201:6, 7 205:4 206:11 209:7, 8, 12, 14 211:12, 14 214:10, 11 216:11, 12 217:4 219:14, 15 221:7 223:15, 16, 20 226:19, 21 229:20 230:4, 5, 14 231:13, 14 235:17, 18 237:16, 17 238:4 240:20, 21 241:5 243:2, 3 246:9, 10, 13, 19 247:2, 6 248:12, 19, 20 251:19, 21 252:17, 19 254:11, 13 255:3 257:15, 17, 21 258:2 262:17 263:7, 9 266:12, 14 269:15, 16 272:1 273:7 276:19 277:6, 11 279:15, 18, 20 283:18, 19 284:10, *12* 287:5, *6* 288:*15* 291:*17* Thankfully 276:1

thanking 84:10 142:12 273:22 thanks 27:13 48:16 49:5 97:22 121:15 130:7 149:12 152:2 161:7, *10*, *16* 170:*1* 201:12 205:3 262:15 263:18 271:2*1* **That'd** 101:12 **thick** 153:18 197:*17* thing 79:10 110:19 120:7, 8 181:*10*, *14* 185:*18* 195:*1* 223:9 234:5, 9 282:5 things 63:4 104:18 111:17 151:19 177:21 186:3 204:2, 3 205:2 229:18 233:16 235:11 236:22 285:19 think 60:14 73:3 75:10 80:10 107:17, 19, 21 108:4, 12, 16 109:1 121:11 195:4, 19 202:9 203:10 204:17 213:16, 20 251:10 268:1, 12 273:1 280:15 282:9 **thinking** 20:12 91:7 107:20 170:20 third 40:16 49:22 171:6 271:3 **THOMAS** 3:10 5:16 77:3, 6 173:5, 11, 13, 15 179:19 THOMPSON 8:2, 7 15:6 16:*13* 19:14 22:3, 11, 12 26:14, 22 31:17 33:18 37:2 38:4 40:20 44:7 48:12 52:4 54:11 58:3 59:11 60:10, 16, 19 61:3 64:21 65:5, 7 68:16, 18 71:18 72:5, 11 75:16 77:1, 12 80:15 83:22 87:2 90:12 93:12, 20 94:5 98:1 99:21 101:19 102:21 103:3 106:10, 15 110:3

118:8, 16 121:17 122:3 125:*1* 128:2 129:7, 12 132:7, 15 134:2, 7 135:*1* 136:15 139:12, 19 142:20 146:5 149:7 152:3 155:6, *12* 159:*4* 161:*3*, 9 163:19 164:18 167:14 170:3 172:18 173:4, 12 177:2, 8 179:11, 18 181:17 182:5, 13 183:1, 7 187:2, 9, 11 190:18 192:18 195:21 200:2 201:7 205:4 206:8 209:8 211:14 214:11, 18 216:12, 20 219:15, 21 220:5, 12, 15 223:16 226:21 227:7, 13 230:5, 9, 12 231:14 232:16, 21 233:1, 5 235:18 236:7 237:17 240:21 243:3 246:10 247:6 248:20 249:5, 11, 20 251:21 252:7 254:13, 21 257:17 262:17 263:3 266:14, 22 269:16 272:1, 7 273:9, 10 276:19 277:5 279:20 283:19 287:6, 18 288:17 289:5, 10, 20 290:7, 11, 20 thought 65:10 228:8 thoughtful 120:9 thoughts 41:5 52:13 **thousand** 189:*13* thousands 46:1 81:3 82:4 256:8 thousand-year 81:22 threat 171:4 203:14 206:22 244:9 258:7, 8 259:7 threaten 153:*14* threatened 89:14 210:21 threatening 31:5 threatens 36:20 216:*1* threats 260:15

three 14:7, 13 16:5 32:10 38:20 55:19 69:4 77:20 78:1 123:6 136:7 149:15 150:9 151:*13* 222:*14* 229:6 283:12 three-minute 32:5, thrive 83:3 256:12 thriving 87:11 169:5 **thrown** 219:8 Thursday 1:10 tied 224:21 **Tightening** 71:8 104:21 140:19 tighter 92:22 93:9 **Tim** 164:22 time 11:15 13:2 14:14 15:13 18:17 22:7 26:12, 18 37:6, 22 40:19 42:11 47:12 49:17 52:19 54:3 57:19 58:7 59:7 61:20 65:15 71:17, 20 72:2 75:20 76:15, 20 81:13 86:1 92:9, 19 93:16 95:10 102:1 103:11 106:8 108:11 109:20 112:20 121:22 124:22 128:6 129:10 130:3 132:12, 22 134:15 135:9 139:17 142:19 148:5 152:2 155:3, 10 163:11, 18 164:1 167:11 170:1, 15, 20 172:22 173:8 177:1 178:1 179:9 181:18 182:2, 9 183:*3*, *5*, *12* 187:*1*, 7 192:21 195:4, 16 196:4 198:4 203:11 205:8 208:14 209:2, 7 213:22 216:16 219:19 220:1, 3 223:11 225:10 226:10 227:3 230:7, 13 231:18 232:13 235:22 245:5, 16 246:9, 11 247:8, 15 249:1, 9, 17 251:19 252:3 254:11, 17 262:22 267:20 269:17

112:2*1* 115:*11*

272:8 273:6, 11, 15
276:22 277:7, 11
279:16, 19 282:15,
20 283:16 285:6
286:7 287:7, 8, 10,
15 288:3, 21 289:6,
14 290:2, 15, 21 timeline 103:20
104:5
timelines 66:5
timely 117:22
130:12
times 32:4, 6 53:9
103: <i>10</i> 121: <i>11</i> 219: <i>11</i> 282: <i>14</i>
TIMOTHY 5:12
164: <i>18</i>
tipping 52:17
Title 63:3 180:5
today 8:17 13:4, 13 14:16, 19, 22
15:10 22:21 27:13
37:3 38:1 51:7, 21
55:5, 20, 21, 22
58:4 59: <i>14</i> 60: <i>9</i>
65:8, 14 69:4
75: <i>17</i> 78: <i>13</i> 81:7 84:7 85:2, <i>12</i>
87: <i>13</i> , <i>15</i> 90: <i>17</i> , <i>21</i>
91:9 93:11 94:13
97: <i>1</i> , <i>20</i> 101: <i>20</i>
103:6 106:9 107:14 108:3 109:3 110:14
107:14 108:3
115:19 118:5
119:2 121: <i>12</i> , <i>16</i>
122: <i>11</i> 124:22
128:3 135:6
136: <i>1</i> 8, <i>1</i> 9 139:9 141: <i>1</i> 6 143: <i>5</i>
144:3 149:2 152:8,
12 155:5 161: <i>17</i>
163:20 165:6
166: <i>18</i> 167: <i>8</i> 171: <i>16</i> 173: <i>14</i> , <i>20</i>
171: <i>16</i> 173: <i>14</i> , 20 177: <i>1</i> , 20 180: <i>13</i>
183:9 184:2 <i>1</i>
196:11 198:10
200:1, 9 201:12
205:5 210:4
211:17, 22 214:3
217:4, 8 218:2 224:2 225:20
226:20 228:9
226:20 228:9 231:15 235:22
237:14, 20 238:6, 16 239:21 241:7
<i>16</i> 239:2 <i>1</i> 241:7
242:14 247:12
249:1 252:14, 18 254:12 255:4
254: <i>12</i> 255: <i>4</i> 258: <i>3</i> 259:20

261:13 262:7, 11,
16 263:10 267:2
270:14, 18 274:7, 9
283:16 284:11
285:6
today's 8:21 10:19 15:2, 8
56:18 63:16 83:8
87:9 104:16 130:8
told 140:18
175:16 204:1 toll 269:5
TONACHEL 3:6
68:19, 21 69:1
tons 17:9 97:13
219:3 250:16
265:8 tool 261:9 276:13
tools 31:7 57:4
62:14 88:7
top 46:5, 8 77:20
116:11 152:18
246:2, <i>14</i> 261:6 272: <i>18</i>
topic 27:13 165:5
174:8 252:19
274:1 284:11
torrential 260:1 total 68:4 86:11
95:19 96:10 121:3
123:6
totally 109:8
tougher 221:9
Town 253:11 townhome 24:10
towns 104:9 162:2
toxic 113:21
114:2 131:2, 10
158:4, 13, 15 210:8, 11 282:2
toxics 63:4
toxins 114:3 185:5
Toyota 38:22 39:1
77:22 78:17, 19
track 11:2 36:12 71:10 74:9 75:4
92:20 95:11
112: <i>14</i> 119: <i>11</i> 137:6 140:8
137:6 140:8
148: <i>10</i> 151:22 156: <i>13</i> 190: <i>10</i>
194:16 218:8
238:14 262:8
tractor 271:6, 9
tractors 175:12
234: <i>3</i> TRACY 3: <i>19</i> 4: <i>5</i>
94:7, 10, 16 115:12,
16
trade 84:8 204:4
traditional 265:15

traditions 118:21
228: <i>16</i> Traffic 137: <i>10</i>
Traffic 137:10 tragic 53:15
Tragically 92:18
Tragically 92:18 trailers 222:17
271:2, 6, 9
train 271:2, 5, 8
trained 227:20
training 127:12
268: <i>4</i> 274: <i>12</i> trains 125:20
203:4
trajectory 36:22
51:18 88:17
124:14 158:8
171:20
TRAN 4:17
139: <i>13</i>
transcript 13:14
transformation 66:18 123:22
transformed 181:8
transforming 55:5
transit 94:20 99:2
147:8 197:12
278:7
transition 30:5, 16
31:3, 15 43:5
56:11, 17 57:16
66: <i>17</i> 67: <i>1</i> , <i>3</i> , <i>7</i> , <i>21</i> 68: <i>5</i> , <i>13</i> 89:22
116:15 126:19
127:14 218:21
222:1 225:8, 11
245:4 254:10
257:2, 10 266:10
276:6, 14
transitioned 281:18
transitioning 281:22
transit-oriented
144:18
transmission 154:3
178:18
transport 79:13
203:16 280:12 Transportation 2:5
3:13 6:14 8:19
9:2 17: <i>18</i> 19: <i>1</i> , <i>7</i> ,
9 27:16 28:1 36:1
9 27:16 28:1 36:1 40:10 62:2, 3 74:6 82:11 84:8, 12 87:17 95:16 96:9,
82:11 84:8, 12
87:17 95:16 96:9,
13 97:21 98:18 100:15 108:8
112:11 126:20
127:6 130:12
131:2 <i>1</i> 151: <i>16</i>
154: <i>1</i> 157: <i>17</i>
158:8 162: <i>12</i>

165:20 166:2 <i>1</i>
172:1 180:18
185:9, <i>16</i> 188: <i>1</i>
198:19 204:16
229:16 235:13
242:6 244:20 252:22 253:18
257.3 259.8 15 16
252:22 253:18 257:3 259:8, 15, 16, 19 263:9, 11, 19, 21 264:2 265:6 276:4
264:2 265:6 276:4
278:7, 8 284:14
transportation- related 96:7
100:10 142:3
144:8 163:1
trap 113:21
trapped 45:15
traumatic 228:19
travel 197:11 travels 39:4
traverse 114:19
TRB 16:18, 20
treasure 199:16
treat 268:19
tree 144:20
trees 178: <i>13</i> 228: <i>18</i>
tremendous 21:3
143:8 250:9
trend 194:5
TREVINO 5:15
172: <i>19</i> 184: <i>14</i> , <i>18</i> , <i>19</i>
tribal 227:17
tribe 227:18
tribe's 228:10
tried 51:9
trillion 141:7
142: <i>18</i> trillions 62: <i>10</i>
trim 178:12
Trip 144:15
188: <i>13</i>
triple 239: <i>10</i> trips 20: <i>19</i> 28: <i>17</i>
trips 20:19 28:17 143:15 242:4
TROMBETTA 6:2
182:10 206:3, 9
Troy 137:2
truck 27:19 28:13,
16, 18 29:6, 11
32:10 43:12 86:10, 12 105:1 178:11
222:18 231:2
234:9 267:17
271:2
271:2 trucks 17: <i>1</i> 28: <i>4</i> 29: <i>1</i> , <i>3</i> , 22 30: <i>4</i> 31: <i>13</i> 36:5 45: <i>10</i>
29:1, 5, 22 30:4 31:13 36:5 45:10
74:1 83:7, 9, 10
85:22 86:13 97:16

100.2 107.16
100.3 107.10
108:3 110:10
100:3 107:16 108:3 110:16 113:21 116:18, 22 119:12 145:2 149:21 156:7
119:12 145:2
149:21 156:/
161:20 162: <i>14</i>
166:6 175: <i>3</i> , <i>1</i> 2
176:6 177:19
188: <i>3</i> , <i>8</i> 193: <i>18</i>
197: <i>14</i> 198: <i>17</i>
204:21 218:10
219:2 224:7 230:3,
21 234:7, 12, 14, 15
238:19, 21 239:3
242:8, 21 253:21
254:9 259:12
263:16 264:21
265:20 266: <i>1</i>
true 120:22
207:19 213:1
266:3 282:17
truly 27:20 31:14
121:8 180: <i>17</i>
254:3 284:18
TRUMBETTA
206:7
Trump 92: <i>19</i> 175:22 206: <i>16</i>
175:22 206:16
221:14 244:17
truth 238:15
truthful 194:22

try 28.9 18 183.5
try 28:9, 18 183:5
193:22 201:20
193:22 201:20 234:19 277:21
193:22 201:20 234:19 277:21 trying 28:12 73:4,
193:22 201:20 234:19 277:21 trying 28:12 73:4, 5 178:19 200:21
193:22 201:20 234:19 277:21 trying 28:12 73:4, 5 178:19 200:21 210:15 238:13
193:22 201:20 234:19 277:21 trying 28:12 73:4, 5 178:19 200:21 210:15 238:13 278:3 282:11
193:22 201:20 234:19 277:21 trying 28:12 73:4, 5 178:19 200:21 210:15 238:13 278:3 282:11 tuning 53:7
193:22 201:20 234:19 277:21 trying 28:12 73:4, 5 178:19 200:21 210:15 238:13 278:3 282:11 tuning 53:7
193:22 201:20 234:19 277:21 trying 28:12 73:4, 5 178:19 200:21 210:15 238:13 278:3 282:11 tuning 53:7 turn 8:9 15:15 16:9 35:11 37:8
193:22 201:20 234:19 277:21 trying 28:12 73:4, 5 178:19 200:21 210:15 238:13 278:3 282:11 tuning 53:7 turn 8:9 15:15 16:9 35:11 37:8 58:9 75:22 102:3
193:22 201:20 234:19 277:21 trying 28:12 73:4, 5 178:19 200:21 210:15 238:13 278:3 282:11 tuning 53:7 turn 8:9 15:15 16:9 35:11 37:8 58:9 75:22 102:3 128:8 134:11
193:22 201:20 234:19 277:21 trying 28:12 73:4, 5 178:19 200:21 210:15 238:13 278:3 282:11 tuning 53:7 turn 8:9 15:15 16:9 35:11 37:8 58:9 75:22 102:3 128:8 134:11 135:11 136:11
193:22 201:20 234:19 277:21 trying 28:12 73:4, 5 178:19 200:21 210:15 238:13 278:3 282:11 tuning 53:7 turn 8:9 15:15 16:9 35:11 37:8 58:9 75:22 102:3 128:8 134:11
193:22 201:20 234:19 277:21 trying 28:12 73:4, 5 178:19 200:21 210:15 238:13 278:3 282:11 tuning 53:7 turn 8:9 15:15 16:9 35:11 37:8 58:9 75:22 102:3 128:8 134:11 135:11 136:11 164:3 183:14 205:10 229:13
193:22 201:20 234:19 277:21 trying 28:12 73:4, 5 178:19 200:21 210:15 238:13 278:3 282:11 tuning 53:7 turn 8:9 15:15 16:9 35:11 37:8 58:9 75:22 102:3 128:8 134:11 135:11 136:11 164:3 183:14 205:10 229:13
193:22 201:20 234:19 277:21 trying 28:12 73:4, 5 178:19 200:21 210:15 238:13 278:3 282:11 tuning 53:7 turn 8:9 15:15 16:9 35:11 37:8 58:9 75:22 102:3 128:8 134:11 135:11 136:11 164:3 183:14 205:10 229:13 231:20 233:3
193:22 201:20 234:19 277:21 trying 28:12 73:4, 5 178:19 200:21 210:15 238:13 278:3 282:11 tuning 53:7 turn 8:9 15:15 16:9 35:11 37:8 58:9 75:22 102:3 128:8 134:11 135:11 136:11 164:3 183:14 205:10 229:13 231:20 233:3 247:17 248:9 280:8
193:22 201:20 234:19 277:21 trying 28:12 73:4, 5 178:19 200:21 210:15 238:13 278:3 282:11 tuning 53:7 turn 8:9 15:15 16:9 35:11 37:8 58:9 75:22 102:3 128:8 134:11 135:11 136:11 164:3 183:14 205:10 229:13 231:20 233:3 247:17 248:9 280:8
193:22 201:20 234:19 277:21 trying 28:12 73:4, 5 178:19 200:21 210:15 238:13 278:3 282:11 tuning 53:7 turn 8:9 15:15 16:9 35:11 37:8 58:9 75:22 102:3 128:8 134:11 135:11 136:11 164:3 183:14 205:10 229:13 231:20 233:3 247:17 248:9 280:8
193:22 201:20 234:19 277:21 trying 28:12 73:4, 5 178:19 200:21 210:15 238:13 278:3 282:11 tuning 53:7 turn 8:9 15:15 16:9 35:11 37:8 58:9 75:22 102:3 128:8 134:11 135:11 136:11 164:3 183:14 205:10 229:13 231:20 233:3 247:17 248:9 280:8 turned 45:9 241:17 255:22
193:22 201:20 234:19 277:21 trying 28:12 73:4, 5 178:19 200:21 210:15 238:13 278:3 282:11 tuning 53:7 turn 8:9 15:15 16:9 35:11 37:8 58:9 75:22 102:3 128:8 134:11 135:11 136:11 164:3 183:14 205:10 229:13 231:20 233:3 247:17 248:9 280:8 turned 45:9 241:17 255:22 268:9
193:22 201:20 234:19 277:21 trying 28:12 73:4, 5 178:19 200:21 210:15 238:13 278:3 282:11 tuning 53:7 turn 8:9 15:15 16:9 35:11 37:8 58:9 75:22 102:3 128:8 134:11 135:11 136:11 164:3 183:14 205:10 229:13 231:20 233:3 247:17 248:9 280:8 turned 45:9 241:17 255:22 268:9 turning 45:11
193:22 201:20 234:19 277:21 trying 28:12 73:4, 5 178:19 200:21 210:15 238:13 278:3 282:11 tuning 53:7 turn 8:9 15:15 16:9 35:11 37:8 58:9 75:22 102:3 128:8 134:11 135:11 136:11 164:3 183:14 205:10 229:13 231:20 233:3 247:17 248:9 280:8 turned 45:9 241:17 255:22 268:9 turning 45:11 147:13
193:22 201:20 234:19 277:21 trying 28:12 73:4, 5 178:19 200:21 210:15 238:13 278:3 282:11 tuning 53:7 turn 8:9 15:15 16:9 35:11 37:8 58:9 75:22 102:3 128:8 134:11 135:11 136:11 164:3 183:14 205:10 229:13 231:20 233:3 247:17 248:9 280:8 turned 45:9 241:17 255:22 268:9 turning 45:11 147:13 turns 194:5 282:15
193:22 201:20 234:19 277:21 trying 28:12 73:4, 5 178:19 200:21 210:15 238:13 278:3 282:11 tuning 53:7 turn 8:9 15:15 16:9 35:11 37:8 58:9 75:22 102:3 128:8 134:11 135:11 136:11 164:3 183:14 205:10 229:13 231:20 233:3 247:17 248:9 280:8 turned 45:9 241:17 255:22 268:9 turning 45:11 147:13 turns 194:5 282:15 Turza 161:4, 7, 10,
193:22 201:20 234:19 277:21 trying 28:12 73:4, 5 178:19 200:21 210:15 238:13 278:3 282:11 tuning 53:7 turn 8:9 15:15 16:9 35:11 37:8 58:9 75:22 102:3 128:8 134:11 135:11 136:11 164:3 183:14 205:10 229:13 231:20 233:3 247:17 248:9 280:8 turned 45:9 241:17 255:22 268:9 turning 45:11 147:13 turns 194:5 282:15 Turza 161:4, 7, 10, 11
193:22 201:20 234:19 277:21 trying 28:12 73:4, 5 178:19 200:21 210:15 238:13 278:3 282:11 tuning 53:7 turn 8:9 15:15 16:9 35:11 37:8 58:9 75:22 102:3 128:8 134:11 135:11 136:11 164:3 183:14 205:10 229:13 231:20 233:3 247:17 248:9 280:8 turned 45:9 241:17 255:22 268:9 turning 45:11 147:13 turns 194:5 282:15 Turza 161:4, 7, 10, 11 twice 24:9 82:2
193:22 201:20 234:19 277:21 trying 28:12 73:4, 5 178:19 200:21 210:15 238:13 278:3 282:11 tuning 53:7 turn 8:9 15:15 16:9 35:11 37:8 58:9 75:22 102:3 128:8 134:11 135:11 136:11 164:3 183:14 205:10 229:13 231:20 233:3 247:17 248:9 280:8 turned 45:9 241:17 255:22 268:9 turning 45:11 147:13 turns 194:5 282:15 Turza 161:4, 7, 10, 11

two 13:11 34:7 35:2, 17 39:3 40:12, 14 52:15 55:22 58:1 67:1 78:6, 17, 19 92:1 95:5 137:11 152:12 159:18 173:5 174:15 210:16 212:20 215:11 219:8 225:14 227:22 253:9 260:3 264:16 274:18 283:12 two-wheeled 263:15
type 29:3 types 18:3 90:3 typically 20:10 178:13, 16 250:1
<u>> US 8:8 34:6 36:2 55:3, 18 69:8, 22 70:8 71:15 73:19, 21 74:9 82:12 84:9 87:18 88:18 95:17 96:10 116:7 117:1 120:16 123:4, 8, 9 127:6 130:4 134:8 139:1 151:17 156:4 160:11 162:13 169:12 203:3, 20 224:11, 17 242:7 276:15 277:17 UCS 119:18 ultimate 33:10 47:2 ultimately 114:21 117:10 155:1 180:6 194:21 UN 42:3 46:7 unable 268:11 unacceptable 189:21 uncle 170:10 uncommonly 228:18 undercarriage 270:19 undercut 51:3 underinsured 267:4 underlying 66:1 171:11 undermine 17:13 73:12 97:9 119:10 understand 109:2 138:19 198:6 239:21 280:17</u>

understanding
119: <i>14</i>
understood 203:14
underway 89:18
undo 221:13
undocumented
216:2 undoing 152:17
undue 49:16
Unfortunately
48:21 53:16 60:22
80:2 145:4 165:6
195:22 221:20 222: <i>17</i> 225: <i>5</i>
222:17 225:5
unhealthy 34:9
114:9 189: <i>11</i> 245:8 258: <i>13</i>
uninsured 267:4
Union 2:20 6:17,
18, 19, 20, 21 48:17
221:5 223:22
230:15
unions 87:9
unique 73:7
Unitarian 167:21 UNITED 1:1 2:13,
UNITED 1:1 2:13, 19 3:20 8:3 28:2
32:1 44:13 45:5
46:15 52:9 54:5,
20 84:14 89:3
90:10 98:8 99:8
104:12 105:16
113:17 134:3
151:15 166:9, 19,
22 167:2 172:3
200:8 201:18 209:2 228:7
229:17 233:10
253:19 256:20
263:22 264:3
unites 87:8
universal 19:8
Universalist 167:22
universally 204:6
universities 138:9
University 43:17
114: <i>17</i> 150: <i>12</i> 161:2 <i>1</i> 173:22
176:3 208:9
unknown 270:13
unmitigated 114:6
unmute 15:14, 17
16:14 19:16 22:15
27:3 31:19 33:20
37:7, 10 38:7
40:22 44:9 48:14
52:6 54:13 58:8, 11 59:8 60:12
65:1 68:19 72:8
75:21 76:2 77:4
75:21 76:2 77:4 80:19 84:2 87:4
I .

90:14 94:8 98:3 102:2, 5, 18, 21, 22 106:12 110:5 113:1, 3 115:13 118:10 122:6 125:3 128:7, 10 129:*15* 135:*10*, *13* 139:22 142:22 146:7 149:9 152:5 155:15 159:6 161:5 164:2, 5, 19 167:16 170:5 177:9 179:13 182:17 183:3, 13, *16* 184:*16* 187:*14* 190:20 192:20 196:7 200:4 201:9 205:9, 12 206:5 209:10 211:18 214:13 216:22 220:8, 13 221:1 223:18 227:10 230:7 231:19, 22 232:18 236:1, 3 237:21 238:2 241:2, 3 243:5 247:16, 19 249:21 252:9 255:*1* 257:19 263:5 266:17, 19 273:19 277:2 279:22 283:20 **unmuted** 220:20 **unmuting** 60:15 unnecessary 29:17 49:1 51:14 57:13 59:20 74:16 91:4 156:15 unobtrusively 270:20 **unpaid** 268:8 unprecedented 153:*14* unpredictability 225:18 unrelenting 267:19 unrelentingly 189:10 unsafe 197:17 unsympathetic 239:22 untrustworthy 83:1 unwarranted 50:12 **up=skill** 127:*13* **update** 277:14 updated 63:6 239:14 279:18 updating 86:19 **upfront** 23:7, 9, 21 **uphill** 104:10

upholding 154:20 upset 240:2 upstream 49:9 **urban** 32:9 123:17 urge 17:11 20:5 21:21 23:1 43:21 59:18 67:18 91:1 97:15, 20 98:12 121:6, 10 132:1 139:6 152:19 154:15 156:17 157:8 160:16, 19 163:13 167:8 186:5 192:12 195:14 199:19 205:1 211:8 212:12 218:6 219:10 222:2 226:11 235:12 236:16 242:20 254:6 255:11 262:7 266:9 267:8 **urgency** 11:16 48:22 217:8 240:3 urgent 20:2 48:20 92:10 148:7 199:9 258:8 urgently 88:8 116:*18* **urges** 69:20 70:21 71:12 127:4 158:12 **urging** 142:13 151:20 **USDA** 204:1 use 9:15 13:7 18:17 21:13 23:1 25:16 31:7 61:8 62:18 67:16 73:16 79:20, 21 88:7 130:8 132:*1* 139:8 160:*3* 169:*1* 174:12 197:16 241:15 248:15 250:16 270:18, 22 271:7 280:18 286:14 288:2 **useful** 271:8 Ute 238:11 utilities 56:5 180:20 utilization 253:14 utilized 250:22 **UUFR** 5:13 < V > vacation 24:16 VALENCIA 6:4

182:10 187:17

200:3

Valenzia 200:6 **valid** 157:1 valuable 92:19 188:20 value 86:6, 14 125:12 250:21 **Van** 147:8 vans 161:20 175:12 **vapor** 79:14 variety 150:14 264:14 270:22 various 34:6 250:6, 17 Varsha 283:20 284:2 V-A-R-S-H-A 284:3 **vast** 116:5 vastly 18:4 Vegas 110:8, 17, 21 113:8, 9, 19 114:5, 18 vegetables 229:7 vehemently 212:10 VEHICLE 1:6 8:5, 15, 19 10:6 11:10 17:21 18:22 20:14 21:9 23:6, 22 24:5, 15 29:4 32:20, 22 36:3, 18 38:22 39:8, 17 44:15 45:19, 22 47:8, 17 55:9, 22 57:2, 17 60:1, 3, 5 67:11, 16 69:2, 12 70:20 73:15 74:2 84:20 87:20 88:14, *17, 19* 89:*1, 7* 90:*1*, 5 92:18 96:3 98:14 109:5, 15, 22 111:16 117:12 118:4 121:13 122:13 125:7, 12, *16*, 20, 22 127:*14*, 16, 20 130:1 131:9, 13 134:5 137:18 138:4, 12 141:3 143:22 144:5, 20 145:2, 17 146:21 147:7 148:*11* 150:19 151:18 152:20 154:8, 12 158:4, 22 159:16, 22 161:19, 20 162:11 163:5 168:3, 12 169:2, 3, *17* 175:9, *17* 178:17 185:14 186:12 192:7 210:14 216:5

219:5, 12 224:7 229:18, 22 230:2 231:7 235:11 241:12 242:11 243:11 247:10 255:4 258:5 260:17 262:4 263:13 264:22 266:3, 12 271:1, 11 273:13 274:3 276:15 277:15 278:15 279:6, 12 281:6, 13 285:3 **vehicles** 10:17 12:5, 14 19:5 21:13 25:22 29:22 30:5, 17, 18 31:4, 15 36:8, 13, 14 38:20 39:1, 3, 14 40:5 41:20 42:8, 15 48:17 49:9 53:2 54:19 55:16, 17, 18 56:3 57:3 61:13 67:3, 9, 10 69:10 70:7, 16 73:21 74:1, 10, 11 75:6 80:6 85:1 86:7, 17 88:1, 11 89:22 90:3 96:5 97:5, 12 100:4, 5, 15 109:8 111:8 116:11 119:20 120:22 123:10, 12, 18 124:17 131:12, 13 140:9 142:8, 9 145:9 147:2, 15 148:2, 18, 21 150:12 154:4 155:3 156:7, 9, 10 157:4, 18, 19 158:14 160:5, 13 162:15, 16 165:10, *15* 166:7, *16* 169:11 175:13 176:15 177:15 178:9, *13* 179:2 185:15 186:1, 13, 14 187:21 192:13 195:13 207:9, 14 210:15 212:17 214:7 217:12, 17 218:13, 21 221:15 222:1, 5, 6, 20 223:2, 4, 12 225:9 226:16 230:17, 20 231:3 234:13, 15, 16, 17 238:21 241:21 242:10 243:17 244:1 250:10 251:15 254:10 257:10, 14

259:8, 20 260:20 261:2, 10 263:15, 17 264:14, 21 265:17 270:13, 15, *18* 271:3, 5, *17*, 21 274:17, 19, 22 275:22 276:12 278:9, 13 282:11 285:10 VehiclesHybrid 3:10 VENNER 2:7 16:14, 16 verbal 16:4 133:1 136:6 **VERDIN** 7:11 252:8, 11, 12 **verge** 235:3 verified 63:16 **version** 120:1 verticals 79:18 **vessels** 38:15 viable 241:8 282:7 Vice 27:9 VICTORIA 3:9 76:17, 18 254:14 273:17, 21 **victory** 111:11 Video 60:20 233:2, 3 280:8 view 92:8 174:2 views 64:18 176:20 280:14 284:9 285:7 vigorously 90:21 **VILLALPANDO** 6:5 182:16 192:20 193:2 VILLAPANDO 193:*1* **VINH** 6:11 209:9, 17 Virginia 41:4 42:6 212:1, 8 Virtual 1:12 8:3, *17* 134:9 virtually 13:6 223:8 230:19 visible 87:19, 22 88:2 visibly 188:16 vision 55:1, 21 63:14 123:14 172:2 218:6 visiting 153:12 vital 27:13 31:14 168:22 217:17 224:22 277:16 vividly 42:11

Voice 5:16 101:2 137:5 173:16 176:16 206:14 voices 73:14 195:3 271:13 Volt 222:14 **volumes** 130:10 voluntarily 78:8 voluntary 82:17, 22 160:10 Volunteer 5:14 27:8 149:12 193:2 196:13 201:13 voter 168:18 **Voters** 6:2 31:1 152:11 174:14, 18 175:5, 14, 20 176:7 206:10 243:8, 20 244:12 245:17 246:3 **voting** 46:5 vulnerability 79:4 vulnerable 82:9 96:8 111:18 194:10 207:22 209:1 262:2 268:22 < W > wait 130:7 269:14 283:16 waited 114:20 waiting 47:1 99:1 104:4 walk 114:16 193:22 202:2 **walkable** 114:*18* walked 42:11 **walking** 114:*18* walks 52:18 115:4 191:4 want 21:11 40:13, 14 52:12 55:19 57:6 61:10 65:14 73:9 84:10 90:19 101:15 106:7 132:8 140:14 180:14, 21 193:12 200:22 209:14 235:1 236:11 237:8 240:15 246:19 250:8 258:2 271:*13* 280:5 282:5 284:21 286:19 291:8, 10 **wanted** 28:11 177:4 185:18 197:6 206:11, 14

wanting 200:9 wants 178:22 War 237:9, 13, 14 **warm** 91:18 188:22 210:19 225:13 255:15 warmer 260:5 warming 20:3 21:14 81:18 139:8 188:2 191:17 192:9 202:8 241:15 **WARREN** 4:18 139:21 140:2, 4 Wars 105:10 wash 213:2 washed 108:16 213:6 Washington 1:22 188:13 189:9 193:5, 21 196:14 198:4 200:7 201:14 202:11 204:10 256:3 280:3 283:7 waste 47:12 155:4 192:16 watch 114:12 198:2 watching 54:8 Watchung 24:3 Water 2:17 38:14 69:7 79:13 108:17 169:15 180:10 188:22 205:*1* 224:2 226:2 240:17 Waukegan 245:9, 11, 16 wave 91:12 188:18 waves 199:3 210:21 way 24:17 25:20 36:8 62:12 80:3, 10 83:19 91:19 96:20 130:11 144:13 153:21 176:11 179:6 185:7, *14* 186:8 189:6, 18 192:3, 8 193:8, *14* 198:*13* 207:1, 4 229:13, 15 233:19 242:14 264:3 282:1 285:14 ways 73:19 87:10 109:11 168:5 180:12 188:4, 14 229:12 242:16 281:13

weak 26:4 145:6 165:8 268:17 weaken 10:6 50:21 weakened 217:6 weakening 69:16 89:13 weakens 51:6 265:14 weaker 73:18 74:13 261:17 **wealth** 163:*3* wealthy 47:11 151:7 wear 285:2 weather 21:15 24:4 79:11, 16, 17 81:19 151:2, 7, 10 213:15 225:18 229:3 260:8 Webcast 1:12 website 10:21 13:16, 18 258:10 week 24:9 92:13 151:2 168:14 202:5, 7 258:9 weekends 137:22 weeks 35:2 226:4 283:12 weight 64:2 231:3 welcome 8:2, 13 60:19 134:2 221:1 230:12 welcomes 116:9 welfare 64:4 69:11 158:9 203:3 well 18:12 42:9 77:14 107:8 110:*17* 117:*1* 119:3 124:7 148:20 149:15 162:18 174:1 177:21 178:6 179:4 192:4 200:15 209:14 214:8 233:20 239:18 252:16 267:16 270:21 275:7 278:8 279:1 281:17 287:3 well-balanced 57:5 well-being 107:9 168:20 277:19 278:4 well-paying 219:6 well-supported 156:21 went 23:13 24:16 161:21 208:9, 13 268:8, 10 we're 34:16 61:7

VOCs 181:5

215:18

67:14 73:1, 7

79:15 83:6, 10
111: <i>4</i> 147: <i>5</i> , <i>10</i> , <i>11</i>
111:4 147:5, 10, 11 154:17 159:20
178:2, 19 195:18
202:9 213:10
202:9 213:10 218:2 224:10
231:4, 7, 8 233:22
234:4, 16 258:9
259:20 260:9
261: <i>5</i> , <i>13</i> 280: <i>18</i>
281: <i>10</i>
west 79:16 106:4
108:18 170:11
212:8 258:11
Westport 5:20
we've 47:7 63:17
78: <i>16</i> 138:2 <i>1</i>
143:8 151: <i>1</i> 181: <i>5</i> ,
8 199:7 250: <i>15</i>
251:6 259:18
whale 189:2
wheezing 215:4
whichever 288:14
Wilchever 200:14
Whidbey 256:3
whistleblower
180:8
WHITE 2:14
99: <i>18</i> 140: <i>17</i>
whiter 142:7
wholeheartedly
115:7
wholly 238:16
wide 28:7 126:7
widely 19:2
widening 19:6
widespread 122:19
wife 98:7 222:14,
17
wildfire 114:1
189:5 255:10
256:2, 14 269:7
wildfires 92:2, 6
108: <i>18</i> 153: <i>8</i> , <i>13</i> ,
14 202:4, 6 224:12
256:9, 18 267:18
268:6 283:12
wildlife 202:13
wildly 29:2
WILLIAM 7:2
248:10, 20, 22
277:1, 7
WILLIAMS 4:21
7:8 146:6, 9, 10
238:4, 5
willing 248:18
win 163:8 167:10
172:8 207:6, 19
208:20
wind 39:13, 19
90.2 200.15
0U;3 ZU8:1.3
80: <i>3</i> 208: <i>15</i>
60:3 208:13

201.12
281: <i>12</i> windfall 50: <i>18</i>
window 178:4
192: <i>15</i> 213: <i>10</i>
windows 189:16
213:7
winds 79:13 82:21
winds 79:13 82:21 WING 5:20 winter 24:4 40:1
winter 24:4 40:1
113:20 winters 260:5
Wiscauke 227:15
Wisconsin 252:13,
15, 16, 22 253:6
274:6, 13 276:8
wish 13:8 20:19
107: <i>11</i>
WISTE 3:11
80:16, 21
withdraw 244:19 withstand 65:18
witnstand 65:18 witnessed 40:1
150:6 225:17
witnesses 161:22
WITT 5:7 159:5, 8
wlll 218:19
Woman 32:2 98:7
228:1
Women 2:13 3:20
52: <i>10</i> 54: <i>5</i> , <i>7</i> 98: <i>9</i> 99: <i>8</i> 243: <i>8</i> , <i>20</i>
99:8 243:8, 20
244: <i>12</i> 245: <i>17</i> 246: <i>3</i> 256: <i>16</i>
246:3 256:16
wonder 213:17, 21 272:17
wonderful 91:5
193:6
Woodward 137:10
word 33:4 62:18
167:3
words 50:20 78:5
work 12:11 21:5 32:14 40:3 55:14
32:14 40:3 55:14
66:9 81:2 107:7
111: <i>13</i> 115:2 117:9 126: <i>15</i>
138:13, 18, 19, 22
138.13, 16, 19, 22 145:14 153:19
160: <i>18</i> 199: <i>14</i>
209:15 210:9
211:21 214:2
239:22 252:13
253:6 255:7 267:3
268:12 273:4
278:9 280:2 <i>1</i>
worked 57:11
85: <i>18</i> 170: <i>11</i> 193: <i>7</i> 198: <i>12</i>
193:7 198:12 253:9 268:6
worker 268:5
WOLKEL ZOO.J

workers 88:11
89:5, 21 90:7, 8
125:9 127: <i>13</i> 188: <i>19</i> 189:22
188: <i>19</i> 189:22
workforce 95:9
127:12
working 17:5
69:17 81:15
117:21 146:12
162:7 174:20
263:20 267:5 268:22 278:16
280:11
World 6:16 18:7
20:16 21:17 34:21
42:4 45:4 46:11,
22 47:9 48:3, 4
53:6 60:6 75:11
79:12, 19 81:17
83:3, 20 92:5 93:3
100:18 105:10
108:12 110:18
121:9 138:8, 17, 19
140.4 151.15
149:4 151: <i>15</i>
153:9 170: <i>17</i>
193:9, 10 207:5
233:13 235:14
238:19 239:12
233:15 235:14 238:19 239:12 242:14 260:12 worlds 170:19
worlds 1/0:19
world's 85:19
92:12 137:13
92: <i>12</i> 137: <i>13</i> worldwide 233: <i>21</i>
92: <i>12</i> 137: <i>13</i> worldwide 233:2 <i>1</i> worried 159: <i>18</i>
92:12 137:13 worldwide 233:21 worried 159:18 200:10 233:12
92:12 137:13 worldwide 233:21 worried 159:18 200:10 233:12 262:10
92:12 137:13 worldwide 233:21 worried 159:18 200:10 233:12 262:10 worrisome 92:8
92:12 137:13 worldwide 233:21 worried 159:18 200:10 233:12 262:10 worrisome 92:8 worry 181:12
92:12 137:13 worldwide 233:21 worried 159:18 200:10 233:12 262:10 worrisome 92:8 worry 181:12
92:12 137:13 worldwide 233:21 worried 159:18 200:10 233:12 262:10 worrisome 92:8 worry 181:12
92:12 137:13 worldwide 233:21 worried 159:18 200:10 233:12 262:10 worrisome 92:8 worry 181:12
92:12 137:13 worldwide 233:21 worried 159:18 200:10 233:12 262:10 worrisome 92:8 worry 181:12
92:12 137:13 worldwide 233:21 worried 159:18 200:10 233:12 262:10 worrisome 92:8 worry 181:12 worse 34:11 103:22 151:11 190:3 196:22 198:22 200:16 224:19 261:19
92:12 137:13 worldwide 233:21 worried 159:18 200:10 233:12 262:10 worrisome 92:8 worry 181:12 worse 34:11 103:22 151:11 190:3 196:22 198:22 200:16 224:19 261:19 267:14, 18
92:12 137:13 worldwide 233:21 worried 159:18 200:10 233:12 262:10 worrisome 92:8 worry 181:12 worse 34:11 103:22 151:11 190:3 196:22 198:22 200:16 224:19 261:19
92:12 137:13 worldwide 233:21 worried 159:18 200:10 233:12 262:10 worrisome 92:8 worry 181:12 worse 34:11 103:22 151:11 190:3 196:22 198:22 200:16 224:19 261:19 267:14, 18
92:12 137:13 worldwide 233:21 worried 159:18 200:10 233:12 262:10 worrisome 92:8 worry 181:12 worse 34:11 103:22 151:11 190:3 196:22 198:22 200:16 224:19 261:19 267:14, 18 worsen 189:17 255:18
92:12 137:13 worldwide 233:21 worried 159:18 200:10 233:12 262:10 worrisome 92:8 worry 181:12 worse 34:11 103:22 151:11 190:3 196:22 198:22 200:16 224:19 261:19 267:14, 18 worsen 189:17 255:18 worst 18:7 35:5 47:15 92:5 156:4
92:12 137:13 worldwide 233:21 worried 159:18 200:10 233:12 262:10 worrisome 92:8 worry 181:12 worse 34:11 103:22 151:11 190:3 196:22 198:22 200:16 224:19 261:19 267:14, 18 worsen 189:17 255:18 worst 18:7 35:5 47:15 92:5 156:4
92:12 137:13 worldwide 233:21 worried 159:18 200:10 233:12 262:10 worrisome 92:8 worry 181:12 worse 34:11 103:22 151:11 190:3 196:22 198:22 200:16 224:19 261:19 267:14, 18 worsen 189:17 255:18 worst 18:7 35:5 47:15 92:5 156:4 165:19 195:5 219:11 242:2
92:12 137:13 worldwide 233:21 worried 159:18 200:10 233:12 262:10 worrisome 92:8 worry 181:12 worse 34:11 103:22 151:11 190:3 196:22 198:22 200:16 224:19 261:19 267:14, 18 worsen 189:17 255:18 worst 18:7 35:5 47:15 92:5 156:4 165:19 195:5 219:11 242:2
92:12 137:13 worldwide 233:21 worried 159:18 200:10 233:12 262:10 worrisome 92:8 worry 181:12 worse 34:11 103:22 151:11 190:3 196:22 198:22 200:16 224:19 261:19 267:14, 18 worsen 189:17 255:18 worst 18:7 35:5 47:15 92:5 156:4 165:19 195:5 219:11 242:2 253:6
92:12 137:13 worldwide 233:21 worried 159:18 200:10 233:12 262:10 worrisome 92:8 worry 181:12 worse 34:11 103:22 151:11 190:3 196:22 198:22 200:16 224:19 261:19 267:14, 18 worsen 189:17 255:18 worst 18:7 35:5 47:15 92:5 156:4 165:19 195:5 219:11 242:2 253:6 worth 141:13
92:12 137:13 worldwide 233:21 worried 159:18 200:10 233:12 262:10 worrisome 92:8 worry 181:12 worse 34:11 103:22 151:11 190:3 196:22 198:22 200:16 224:19 261:19 267:14, 18 worsen 189:17 255:18 worst 18:7 35:5 47:15 92:5 156:4 165:19 195:5 219:11 242:2 253:6 worth 141:13 wrecking 282:12
92:12 137:13 worldwide 233:21 worried 159:18 200:10 233:12 262:10 worrisome 92:8 worry 181:12 worse 34:11 103:22 151:11 190:3 196:22 198:22 200:16 224:19 261:19 267:14, 18 worsen 189:17 255:18 worst 18:7 35:5 47:15 92:5 156:4 165:19 195:5 219:11 242:2 253:6 worth 141:13 wrecking 282:12 write 240:9 writing 14:4
92:12 137:13 worldwide 233:21 worried 159:18 200:10 233:12 262:10 worrisome 92:8 worry 181:12 worse 34:11 103:22 151:11 190:3 196:22 198:22 200:16 224:19 261:19 267:14, 18 worsen 189:17 255:18 worst 18:7 35:5 47:15 92:5 156:4 165:19 195:5 219:11 242:2 253:6 worth 141:13 wrecking 282:12 write 240:9 writing 14:4
92:12 137:13 worldwide 233:21 worried 159:18 200:10 233:12 262:10 worrisome 92:8 worry 181:12 worse 34:11 103:22 151:11 190:3 196:22 198:22 200:16 224:19 261:19 267:14, 18 worsen 189:17 255:18 worst 18:7 35:5 47:15 92:5 156:4 165:19 195:5 219:11 242:2 253:6 worth 141:13 wrecking 282:12 write 240:9 writing 14:4 written 13:10
92:12 137:13 worldwide 233:21 worried 159:18 200:10 233:12 262:10 worrisome 92:8 worry 181:12 worse 34:11 103:22 151:11 190:3 196:22 198:22 200:16 224:19 261:19 267:14, 18 worsen 189:17 255:18 worst 18:7 35:5 47:15 92:5 156:4 165:19 195:5 219:11 242:2 253:6 worth 141:13 wrecking 282:12 write 240:9 writing 14:4 written 13:10 16:6 57:20 86:22
92:12 137:13 worldwide 233:21 worried 159:18 200:10 233:12 262:10 worrisome 92:8 worry 181:12 worse 34:11 103:22 151:11 190:3 196:22 198:22 200:16 224:19 261:19 267:14, 18 worsen 189:17 255:18 worst 18:7 35:5 47:15 92:5 156:4 165:19 195:5 219:11 242:2 253:6 worth 141:13 wrecking 282:12 write 240:9 writing 14:4 written 13:10 16:6 57:20 86:22 101:5 118:6
92:12 137:13 worldwide 233:21 worried 159:18 200:10 233:12 262:10 worrisome 92:8 worry 181:12 worse 34:11 103:22 151:11 190:3 196:22 198:22 200:16 224:19 261:19 267:14, 18 worsen 189:17 255:18 worst 18:7 35:5 47:15 92:5 156:4 165:19 195:5 219:11 242:2 253:6 worth 141:13 wrecking 282:12 write 240:9 writing 14:4 written 13:10 16:6 57:20 86:22

```
wrong 24:19
50:13 91:20
wrongs 208:18
wrote 144:13
WYMAN 5:3
155:7 270:3, 7
Wyoming 189:12
Wysor 9:1
< Y >
Yale 150:12 176:3
yeah 24:2 236:8
YEAR 1:5 8:5
10:17 12:6, 14, 15
17:3 28:15 51:4
62:6 70:6, 22 71:8,
13 74:12 77:15
86:4 93:1 116:10
134:5 143:15, 19
150:9 157:11
178:3, 6 188:8
190:14 194:1
217:10, 17, 19, 21
224:18 228:8, 10
229:4, 21 243:11
247:9 253:3 256:9
257:7 264:5
267:17, 20 273:13
276:7 285:17
286:6, 7
year-old 112:5
Years 17:5, 6
20:11 30:9 38:15
45:3 50:21 51:2,
13 54:6 56:1
61:20 62:7 69:19
70:13 75:7 78:22
81:16 98:21
103:19, 21 107:1
114:6 127:18
137:20 143:9
146:12 153:17
157:2 170:13
177:13 193:7, 19
198:17 200:7
222:8, 10 229:9
230:18 234:10
239:10 250:18
253:9 264:17
280:13, 22 285:13
yellow 45:13
yesterday 13:13
75:14 91:9 235:2
258:10, 14
yield 40:19
York 32:9 72:15,
18 106:4
young 106:7
149:15 151:13
```

ZACH 3:16 93:13 106:11, 16 **Zero** 6:14 23:18 24:12 28:19, 20 30:5, 16 31:15 36:7, 14 39:9 41:17, 19 42:14 43:12 55:15 57:3 83:9, 11, 12 97:5 118:4 122:13 123:19 125:15 130:18 131:12 147:15 148:12, 18 157:4, 17, 19 163:14 171:22 172:16 195:13 212:17 214:6, 7 218:1, 15 238:21 240:10 242:10, 11 245:4 246:7 254:10 257:10 263:8, 10 269:13 281:11 282:22 zero-emission 263:21 zero-emitting 218:9, 21 **ZETA** 263:11, 18 264:8, 11 265:2 266:4 **ZETA's** 266:8 **ZEVs** 157:21 **ZF** 5:22 **zipcodes** 180:11

< Z >

201:17 291:14