

MEETING  
STATE OF CALIFORNIA  
AIR RESOURCES BOARD

CALEPA HEADQUARTERS  
BYRON SHER AUDITORIUM  
SECOND FLOOR  
1001 I STREET  
SACRAMENTO, CALIFORNIA

THURSDAY, MAY 25, 2017

9:12 A.M.

JAMES F. PETERS, CSR  
CERTIFIED SHORTHAND REPORTER  
LICENSE NUMBER 10063

A P P E A R A N C E S

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A P P E A R A N C E S C O N T I N U E D

STAFF:

Ms. Veronica Eady, Assistant Executive Officer

Mr. Pippin Brehler, Senior Attorney, Legal Office

Mr. Renaldo Crooks, Air Pollution Specialist, Regulatory Assistance Section, Industrial Strategies Division (ISD)

Ms. Shannon Dilley, Attorney, Legal Office

Ms. Ashley Dunn, Air Pollution Specialist, Innovative Strategies Branch, Mobile Source Control Division(MSCD)

Mr. Sam Gregor, Manager, Innovative Strategies Branch, MSCD

Mr. Wes Ingram, Chief, Project Assessment Branch, ISD

Ms. Margret Kim, Senior Attorney, Legal Office

Mr. Jack Kitowski, Division Chief, MSCD

Mr. Tung Le, Manager, Regulatory Assistance Section, ISD

Ms. Karen Magliano, Division Chief, Air Quality Planning and Science Division(AQPSD)

Ms. Margaret Minnick, International Liaison, Chair's Office

Mr. Webster Tasat, Manager, Central Valley Air Quality Planning Section, AQPSD

Ms. Sylvia Vanderspek, Chief, Air Quality Planning Branch, AQPSD

Mr. Floyd Vergara, Division Chief, ISD

ALSO PRESENT:

Ms. Adenike Adeyeye, Earthjustice, Central Valley Air Quality Coalition

Mr. Cesar Aguirre, Central Valley Air Quality Coalition

A P P E A R A N C E S C O N T I N U E D

ALSO PRESENT:

Mr. John Boesel, CalStart

Mr. Manuel Cunha, Jr., Nisei Farmers League

Ms. Janet Dietzkamei, Central Valley Air Quality Coalition

Ms. Grecia Elenes, Leadership for Justice &  
Accountability, Central Valley Air Quality Coalition

Mr. Linus Farias, Pacific Gas & Electric

Mr. Alan Forkey, United States Department of Agriculture,  
Natural Resources Conservation Service

Mr. Tom Frantz, Central Valley Air Quality Coalition

Ms. Genevieve Gale, Central Valley Air Quality Coalition

Mr. Sheraz Gill, San Joaquin Valley Air Pollution Control  
District, California Air Pollution Control Officers  
Association

Mr. Thomas Helme, Central Valley Air Quality Coalition

Ms. Bonnie Holmes-Gen, American Lung Association in  
California

Ms. Angela Islas, Central Valley Air Quality Coalition

Mr. Roger Isom, California Cotton Ginners, and Growers  
Association, Western Agricultural Processors Association

Mr. Shrayas Jatkar, Coalition for Clean Air

Mr. Ryan Kenny, Clean Energy

Ms. Alexa Kleysteuber, Deputy Secretary, California  
Environmental Protection Agency

Ms. Destini Luna, Central Valley Air Quality Coalition

Mr. Ronald Martin, Central Valley Air Quality Coalition

Ms. Nayamin Martinez, Central Valley Air Quality Coalition

A P P E A R A N C E S C O N T I N U E D

ALSO PRESENT:

Ms. Alana Mathews, California Energy Commission

Mr. Thomas Menz, Central Valley Air Quality Coalition

Ms. Sarhely Morales, Central Valley Air Quality Coalition

Ms. Yolanda Park, Catholic Charities Diocese of Stockton

Mr. Roman Partida-Lopez, Center for Sustainable Energy

Mr. Michael Pimentel, California Transit Association

Ms. Samantha Rubio, Central Valley Air Quality Coalition

Ms. Sarah Sharpe, Central Valley Air Quality Coalition

Mr. Jared Sanchez, California Bicycle Coalition

Mr. Dolores Weller, Central Valley Air Quality Coalition

Mr. Earl White, Central Valley Air Quality Coalition

Ms. Kate White, California State Transportation Agency

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

CHAIR NICHOLS: Good morning, ladies and gentlemen, and welcome to the May 25th, 2017 public meeting of the Air Resources Board. The meeting will now come to order, and we will begin with the Pledge of Allegiance to the flag.

(Thereupon the Pledge of Allegiance was recited in unison.)

CHAIR NICHOLS: Thank you.

Let's have a roll call.

BOARD CLERK McREYNOLDS: Dr. Balmes?

BOARD MEMBER BALMES: Here.

BOARD CLERK McREYNOLDS: Mr De La Torre?

Mr. Eisenhut?

Senator Florez?

Assembly Member Garcia?

Supervisor Gioia?

BOARD MEMBER GIOIA: Here.

BOARD CLERK McREYNOLDS: Senator Lara?

Ms. Mitchell?

BOARD MEMBER MITCHELL: Here.

BOARD CLERK McREYNOLDS: Mrs. Riordan?

BOARD MEMBER RIORDAN: Here.

BOARD CLERK McREYNOLDS: Supervisor Roberts?

BOARD MEMBER ROBERTS: Here.



1 BOARD CLERK McREYNOLDS: Supervisor Serna?

2 Dr. Sherriffs?

3 BOARD MEMBER SHERRIFFS: Yes.

4 BOARD CLERK McREYNOLDS: Professor Sperling?

5 BOARD MEMBER SPERLING: Yes. Here.

6 BOARD CLERK McREYNOLDS: Ms. Takvorian?

7 BOARD MEMBER TAKVORIAN: Here.

8 BOARD CLERK McREYNOLDS: Vice Chair Berg?

9 VICE CHAIR BERG: Here.

10 BOARD CLERK McREYNOLDS: Chair Nichols?

11 CHAIR NICHOLS: Here.

12 BOARD CLERK McREYNOLDS: Madam Chair, we have a  
13 quorum.

14 CHAIR NICHOLS: Thank you. A couple of  
15 announcements before we get started. First, I need to  
16 mention interpretation services. Our interpreter is here  
17 today to interpret in Spanish for Item 17-5-3, which is  
18 the public meeting to hear a continuation of the update to  
19 the PM2.5 SIP development for the San Joaquin Valley.  
20 Headsets are available outside the hearing room at the  
21 attendance sign-up table, and can be picked up at any  
22 time.

23 (Thereupon the interpreter spoke in Spanish.)

24 CHAIR NICHOLS: Thank you. Anyone who wishes to  
25 testify should fill out a request to speak card that's

1 available in the lobby outside the Board room. We  
2 appreciate it if you would turn it into a Board assistant  
3 or the Clerk of the Board prior to the commencement of the  
4 item, so that we can assemble a list of speakers and know  
5 how many people we need to accommodate.

6           Also, anyone who wishes to speak should be aware  
7 that we impose a three-minute time limit on oral  
8 testimony. We appreciate it if you'd state your first and  
9 last name when you come up to the podium, and then put  
10 your testimony in your own words. If you are speaking in  
11 Spanish or through an interpreter, we do allow extra time,  
12 because of the extra time for translation.

13           But if you have written testimony, we appreciate  
14 it, if you'd submit that, and not just read it. For  
15 safety reasons, I need to point out that we've got  
16 emergency exits to the rear of the room. And in the event  
17 of a fire alarm, we're required to evacuate this room  
18 immediately and go down the stairs and outside the  
19 building until we hear the all-clear signal when we can  
20 return to the building.

21           This morning, we have as our first item, I  
22 believe is the consent item, is that correct, yes, right  
23 here.

24           We are removing this item from the consent  
25 calendar and providing an opportunity for staff to further

1 describe the plan, as well as to provide a context for how  
2 the U.S. EPA recently responded to a petition for  
3 reconsideration of its regulation. So I will turn to  
4 staff now for an explanation and a report.

5 EXECUTIVE OFFICER COREY: All right. Thanks,  
6 Chair Nichols. On August 29th, 2016, EPA published update  
7 emission guidelines that were originally promulgated in  
8 1996 to reduce emissions of landfill gas, which contain  
9 both non-methane organic compounds and methane from  
10 existing municipal solid waste landfills. And as you  
11 know, methane is a powerful climate-forcing pollutant, and  
12 non-methane organic compounds contribute to the formation  
13 of smog, which is detrimental to public health.

14 The federal Clean Air Act requires State  
15 regulatory agencies to implement and enforce U.S. EPA's  
16 updated emission guidelines. Originally, the State Plan  
17 was required to be submitted to U.S. EPA by May 30th of  
18 2017. U.S. EPA recently stayed the submittal date by 90  
19 days.

20 Staff consulted with stakeholders, the air  
21 districts, and CAPCOA and have achieved consensus on the  
22 proposal to submit ARB's existing landfill methane rule as  
23 California's compliance plan under U.S. EPA's emission  
24 guidelines. Staff believes the landfill methane  
25 regulation realizes significant greenhouse gas and

1 criteria pollutant reductions as well as recusing noxious  
2 and odorous compounds resulting in important public health  
3 benefits, particularly for Californians in disadvantaged  
4 communities.

5           So although EPA has stayed the emission  
6 guidelines, staff believe that we should proceed with  
7 submittal of California's compliance plan by the original  
8 due date of May 30th, 2017, as it will demonstrate that  
9 additional emission reductions from the source category  
10 are not only possible, but have already been achieved in  
11 our State. I'll now ask Renaldo Crooks to give a brief  
12 staff presentation.

13           Renaldo.

14           (Thereupon an overhead presentation was  
15 presented as follows.)

16           AIR POLLUTION SPECIALIST CROOKS: Okay. Thank  
17 you, Mr. Corey. Good morning, Chair Nichols and members  
18 of the Board. As Mr. Corey noted, I will be presenting  
19 staff's proposed strategy for compliance with the new  
20 initial -- emission guideline requirements for municipal  
21 solid waste landfills. Staff fully supports U.S. EPA's  
22 rulemaking efforts to reduce both methane and non-methane  
23 organic compounds from landfills. And staff's proposed  
24 strategy complements those federal efforts.

25           --o0o--

1           AIR POLLUTION SPECIALIST CROOKS: I'll start with  
2 the primer landfill gas and controls and discuss  
3 California's various programs that regulate emissions from  
4 landfills. Next, I will step you through a brief timeline  
5 that leads up to the development of the proposed State  
6 plan, discuss California's landfill methane regulation,  
7 and describe how it's similar, but more stringent than  
8 U.S. EPA's revised emission guidelines.

9           I will also discuss the new federal rule for  
10 existing municipal solid waste landfills, and the  
11 requirements for states to submit a State plan to  
12 implement the new federal rule, and will present our  
13 strategy for complying with the federal emission  
14 guidelines. I will close with staff's proposed  
15 recommendation.

16   --o0o--

17           AIR POLLUTION SPECIALIST CROOKS: The  
18 decomposition of organics in municipal solid waste  
19 landfills produces landfill gas comprising about equal  
20 amounts of carbon dioxide and methane along with trace  
21 gases. The trace gases include toxics non-methane organic  
22 compounds, also called volatile organic compounds, which  
23 contribute to the formation of ground level ozone.

24           Methane is a short-lived greenhouse gas  
25 pollutant, which is 72 times more potent than carbon

1 dioxide over a 20-year time horizon. The control of  
2 landfill gas prevents most methane and toxic compounds  
3 contained in the gas from either being released into the  
4 atmosphere as fugitive emissions or migrating underground  
5 to cause groundwater contamination.

6           Based on ARB's Short-Lived Climate Pollutant Plan  
7 that was approved by the Board earlier this year,  
8 landfills make up approximately 20 percent of California's  
9 total methane emissions or 24 out of a total 118 tons of  
10 carbon dioxide equivalent, using a 20-year global warming  
11 potential value emitted from all in-State methane sources  
12 in 2013.

13                           --o0o--

14           AIR POLLUTION SPECIALIST CROOKS: The landfill  
15 methane regulation requires owners to install and operate  
16 an active well-maintained landfill gas collection and  
17 control system. Active gas collection systems employ  
18 mechanical blowers or compressors to create a pressure  
19 gradient and extract landfill gas.

20           A typical active gas collection system with  
21 extraction wells is shown in this slide. This slide shows  
22 the components of a typical active gas collection control  
23 system used to produce energy.

24           The collection and control system is the backbone  
25 of minimizing landfill gas from migrating out of the

1 landfill and into the environment.

2 --o0o--

3 AIR POLLUTION SPECIALIST CROOKS: Once collected,  
4 most landfill gas control systems utilize a flare to  
5 safely combust the gas to control the methane and  
6 non-methane organic compounds. Some collected landfill  
7 gas is used to produce energy using microturbines,  
8 internal combustion engines, gas turbines, boilers, and  
9 fuel cells. Some landfill gas is treated to produce a  
10 fuel product. These include landfill gas to vehicle fuel  
11 and pipeline quality biomethane.

12 However, more work needs to be done to ensure  
13 that landfill gas is not simply combusted without energy  
14 recovery. In addition, there's ongoing work to reduce the  
15 amount of organics going into landfills. SB 1383 puts a  
16 renewed focus on organics diversion, the development of  
17 which is being led by CalRecycle.

18 The landfill methane regulation builds on  
19 existing controls adopted under ARB's landfill suggested  
20 control measure, and local air district and federal  
21 landfill rules.

22 --o0o--

23 AIR POLLUTION SPECIALIST CROOKS: Since 1986, ARB  
24 has been reducing emissions from landfills. In 1986, the  
25 Calderon Bill, or AB 3374, required landfill owners and

1 operators to test their landfills for potential toxics.  
2 In 1987, the Connelly Bill, also known as AB 2588,  
3 required each district to prioritize their landfills  
4 according to the severity of the toxic emissions. High  
5 priority landfills have to prepare health risk  
6 assessments.

7 In 1990, ARB adopted a suggested control measure,  
8 which was designed to reduce emissions of non-methane  
9 organic compounds from municipal solid waste landfills.  
10 In 1996, the U.S. EPA issued landfill emission guideline  
11 requirements to reduce non-methane organic compounds from  
12 existing municipal solid waste landfills. The guidelines  
13 are implemented under Section 111(d) of the Federal Clean  
14 Air Act, which requires affected states to submit plans to  
15 the U.S. EPA detailing how they will implement them.

16 In 1997, ARB developed California's compliance  
17 plan in cooperation with California Air Pollution Control  
18 Officers Association, or CAPCOA and affected air  
19 districts. Because no statewide landfill rule was in  
20 place, the 1997 Emission Guidelines Compliance Plan  
21 consisted of a compilation of landfill rules adopted by  
22 each individual air district.

23 In 2008, recognizing the importance of reducing  
24 methane emissions, ARB's first scoping plan identified  
25 methane reductions from landfills as a priority discrete



1 early action. As a result, in 2010, ARB adopted the  
2 landfill methane regulation as a statewide regulation as  
3 an AB 32 discrete early action measure.

4 --o0o--

5 AIR POLLUTION SPECIALIST CROOKS: Similar to the  
6 guidelines, the landfill methane regulation requires the  
7 installation a well-maintained and operated gas collection  
8 control system for affected sources. Also, like the  
9 guidelines, the landfill methane regulation requires  
10 affected sources to control their landfill gas emissions  
11 by monitoring their landfills, keeping records, reporting  
12 their emissions, and installing gas collection and control  
13 systems, if specified thresholds are exceeded.

14 However, many of the landfill methane  
15 regulations' requirements are more stringent than the  
16 guidelines, which results in greater emission reductions.  
17 The landfill methane regulation achieves greater emission  
18 reductions, which I will discuss in more detail later in  
19 my presentation.

20 --o0o--

21 AIR POLLUTION SPECIALIST CROOKS: Under section  
22 111(d) of the Clean Air Act, U.S. EPA developed emission  
23 guidelines to control landfill emissions. The purpose of  
24 the guidelines is to reduce non-methane organic compounds  
25 and methane emissions from existing municipal solid waste

1 landfills. Under the framework of section 111(d) of the  
2 Federal Clean Air Act affected states are required to  
3 develop a State compliance plan, which details how the  
4 states will implement and enforce the requirements of the  
5 guidelines.

6 State plans are to be submitted to the U.S. EPA  
7 by May 30th, 2017. As I will discuss later, the  
8 regulation is currently stayed by the U.S. EPA.

9 --o0o--

10 AIR POLLUTION SPECIALIST CROOKS: I will now  
11 discuss some of the key updated provisions of the emission  
12 guidelines. These include lowering the non-methane  
13 organic compound emission thresholds of 50 megagrams per  
14 year, which triggers the need for the gas collection  
15 control system to 34 megagrams per year, except for a new  
16 closed landfill subcategory, for which the non-methane  
17 organic compound threshold is 50 megagrams per year.

18 A new tier 4 methodology has been added to the  
19 rules to assess whether a gas collection control system is  
20 required once the non-methane organic compound emissions  
21 equal or exceed 34 megagrams per year.

22 In addition, there are new requirements for  
23 electronic reporting, annual liquids reporting, surface  
24 emissions monitoring, wellhead monitoring, gas treatment  
25 systems, and startup, shutdown, and malfunction.

1           As previously mentioned, ARB's landfill methane  
2 regulation is similar to the U.S. EPA's emission  
3 guidelines but contains more stringent requirements for  
4 the gas collection and control system, surface emissions  
5 monitoring, component leak testing, and compliance time  
6 frames.

7                               --o0o--

8           AIR POLLUTION SPECIALIST CROOKS: In the third  
9 quarter of 2016, ARB staff established a work group  
10 consisting of representatives from the local air  
11 districts, U.S. EPA, CAPCOA, and other interested parties  
12 to explore compliance strategies informing development of  
13 the State Plan.

14           Two strategies were considered:

15           The first was to follow the same strategy  
16 undertaken in 1997 when the original plan was developed.  
17 That is for each affected district to undertake rulemaking  
18 activities to update their existing landfill rules to  
19 comply with the updated emission guidelines.

20           The second option considered was to submit the  
21 landfill methane regulation, or LMR, as California's  
22 compliance plan, since the LMR is more stringent than the  
23 emission guidelines.

24           On January the 10th, 2017, ARB staff held a  
25 public meeting to present and discuss the work group's

1 findings and recommendations for compliance with the  
2 guidelines. ARB staff received comments from the public  
3 meeting in support of the second option to seek  
4 equivalency with the guidelines using California's more  
5 stringent LMR as the compliance plan.

6           Because of the LMR's greater stringency and  
7 positive feedback from the public, staff is proposing to  
8 submit ARB's LMR as California's State plan. The benefits  
9 of staff's proposed compliance strategy are that it nets a  
10 greater reduction in methane emissions. Staff estimates  
11 that the LMR regulates an additional 29 landfills compared  
12 to the updated emission guidelines, and all of the  
13 landfills that would be required to install new controls  
14 under the updated guidelines have already installed  
15 controls under the LMR.

16           The LMR also has co-benefits because it reduces  
17 emissions by at least an additional 87,000 metrics tons of  
18 CO2 equivalent, and 195 tons of non-methane organic  
19 compounds annually compared to those that would be  
20 achieved under the updated guidelines.

21           And it also reduces regulatory burden and  
22 simplifies compliance. The landfill methane regulation is  
23 a statewide regulation that has been in effect since 2010.  
24 It is already being implemented by affected landfills and  
25 is being jointly enforced by ARB and the local air

1 districts.

2           Affected landfill owners and operators are  
3 already familiar with the LMR's requirements, and many key  
4 requirements of the guidelines actually mirror those found  
5 in the LMR. Sources complying with the requirements of  
6 ARB's LMR will also comply with the guidelines. Staff's  
7 proposal to submit the LMR as California's compliance plan  
8 also has broad support from the regulated community,  
9 CAPCOA, and the air districts.

10                           --o0o--

11           AIR POLLUTION SPECIALIST CROOKS: ARB continues  
12 to work to reduce greenhouse gas emissions at landfills.  
13 The Board recently approved the Short-Lived Climate  
14 Pollutant Reduction Strategy, which includes targets for  
15 the diversion of organics from landfills by 50 percent of  
16 2014 levels by 2020, and 75 percent of the 2014 levels by  
17 2025.

18           In keeping with SB 1383, CalRecycle is developing  
19 regulations to meet these diversion targets. We  
20 anticipate that this measure will result in an additional  
21 reduction of four million metric tons of methane in 2030,  
22 which results in 14 million tons of methane reduced over  
23 the lifetime of waste decomposition.

24           Finally, ARB's draft 2017 Climate Change Scoping  
25 Plan update relies on methane reductions from the

1 Short-Lived Climate Pollutant Reduction Strategy and  
2 highlights cross-sector opportunities.

3 --o0o--

4 AIR POLLUTION SPECIALIST CROOKS: As I mentioned  
5 in the previous slide, the emission guidelines are  
6 currently stayed. In response to a petition from  
7 industry, EPA issued a 90-day stay -- administrative stay  
8 on the implementation of the guidelines on May 5th, 2017  
9 to reconsider the rule.

10 The U.S. EPA indicated that as part of the  
11 reconsideration, it may prepare a Notice or Proposed  
12 Rulemaking that would examine key provisions of the rule,  
13 including tier 4 surface emissions monitoring, annual  
14 liquids reporting, and overlapping applicability with  
15 other rules.

16 In keeping with ARB's mission of reducing  
17 greenhouse gas emissions and protecting public health, and  
18 because of the current federal administration's priorities  
19 with regard to environmental protection, staff believe  
20 moving forward with the submittal of the State Plan and  
21 working with the U.S. EPA during the rulemaking process  
22 will help ensure the revised guidelines continue to  
23 achieve maximum climate and public health protections.

24 --o0o--

25 AIR POLLUTION SPECIALIST CROOKS: In summary, we

1 recommend that the Board adopt the proposed plan and  
2 direct the Executive Officer to submit it to the U.S. EPA.  
3 California has been first in reducing greenhouse gas  
4 emissions in many sectors, and we believe that the  
5 landfill methane regulation should be held as a model of  
6 what the other states can accomplish above and beyond U.S.  
7 EPA's current rule.

8           We will continue to work with the U.S. EPA and  
9 other states to show what has been accomplished in  
10 California can be achieved nationwide.

11           Thank you.

12           CHAIR NICHOLS: Thank you very much, Mr. Crooks.  
13 We have a representative of CAPCOA here this morning as I  
14 believe the only speaker who signed up on this item, so  
15 please come forward, Mr. Gill.

16           MR. GILL: Good morning, Chair and members of the  
17 Board. I'm here on behalf the San Joaquin Valley Air  
18 Pollution Control District and CAPCOA, and I'll have just  
19 a short statement today.

20           I basically want to state that I'm in -- we are  
21 in full support of ARB's staff recommendation to submit  
22 the California landfill methane regulation that was  
23 adopted in 2009 as an equivalent regulation to meet the  
24 current federal landfill new source performance standards  
25 to reduce non-methane organic compounds emissions from

1 municipal solid waste landfills.

2           As the air quality regulators with authority over  
3 stationary sources, including landfills, air districts  
4 have been regulating municipal solid waste landfills and  
5 requiring methane control since the original federal NSPS  
6 became effective in 1997.

7           As noted in the staff report, ARB identified  
8 further methane controls at landfills as an early action  
9 measure in the first AB 32 scoping plan, leading to the  
10 California landfill methane regulation adopted in 2009.

11           Air districts were very involved in the  
12 regulatory process, as well as the MOU process that  
13 provided districts the option to enforce the regulation as  
14 part of the normal landfill permitting activities. Almost  
15 all municipal solid waste landfills in California covered  
16 by the California landfill methane regulation are  
17 currently being regulated by air districts under the MOU,  
18 which has provided significant reductions of methane  
19 through leak checks and more frequent inspection of  
20 landfill cover.

21           While comparing the California landfill methane  
22 regulation with the most recent federal NSPS will show  
23 slight regulatory differences, we support ARB staff's  
24 determination that the California landfill methane  
25 regulation is equivalent or more stringent than the



1 federal NSPS.

2           This determination would also reduce the need for  
3 ARB to reopen their landfill methane regulation to comport  
4 to the federal NSPS with a less stringent regulation or  
5 reducing a requirement for 35 air districts to develop  
6 a -- new rules to individually show compliance with the  
7 federal NSPS.

8           The air district and CAPCOA urges you to support  
9 staff's recommendation and we thank you for the  
10 opportunity to comment.

11           CHAIR NICHOLS: Thank you. Any questions from  
12 the Board members about this item?

13           As you can see, originally we thought this was  
14 going to be completely non-controversial until EPA landed  
15 another surprise on us. And so I thought it was important  
16 that we bring it before the Board to reaffirm our  
17 commitment to this program.

18           It shouldn't have been a controversial item,  
19 given all the process that went on and the history, but it  
20 seems as though our friends in Washington are determined  
21 to relook at every single item of Clean Air Act compliance  
22 and implementation, and to really throw a monkey wrench  
23 into the process that's been used for a long time now to  
24 make continued progress on both clean air and climate  
25 pollutants.

1           So given the importance of this issue to  
2 California, we think it's worth noting that we are moving  
3 ahead, and that we intend this to be sent, not only to be  
4 used by use, which, of course, it will be, but also to be  
5 sent on to EPA to make it clear to them that this is  
6 something that this State, and we think others also are  
7 going to want to continue.

8           If any other Board members have a question or  
9 comment?

10           Yes, Ms. Takvorian, please.

11           BOARD MEMBER TAKVORIAN: I just -- I appreciate  
12 that we have brought it forward and for all the reasons  
13 that you stated. I wondered whether there's any risk here  
14 not of submitting, but if there's -- if the authority of  
15 ARB or the State of California is in question at all here  
16 with this plan?

17           CHAIR NICHOLS: That's a good question. Would we  
18 like any legal comment here?

19           Yes.

20           ATTORNEY DILLEY: Legal has reviewed this, and we  
21 have done a comparison between the LMR and the emission  
22 guidelines. And we are allowed to submit plans that are  
23 more stringent than the federal requirements. And so we  
24 believe we do have the authority to submit this after  
25 doing a comparison of all the provisions.

1 BOARD MEMBER TAKVORIAN: Thank you.

2 CHAIR NICHOLS: That's a good question to raise  
3 though.

4 All right. Well, hearing no other comments then,  
5 I would ask for a motion.

6 BOARD MEMBER SHERRIFFS: Motion.

7 VICE CHAIR BERG: Second.

8 CHAIR NICHOLS: Okay. Moved by Dr. Sherriffs,  
9 second by Ms. Berg.

10 All in favor please say aye?

11 (Unanimous aye vote.)

12 CHAIR NICHOLS: Opposed?

13 Any abstentions?

14 Great. Thank you so much. Good job.

15 While we're changing to the next item, which I  
16 guess is our -- actually a consent item, I noticed that  
17 one of our Board members was a little bit late this  
18 morning, because he was at his own District Board meeting.  
19 And I'd like to ask Mr. Serna to give us a report on what  
20 he's been up to.

21 (Laughter.)

22 BOARD MEMBER SERNA: Man, am I going to --

23 CHAIR NICHOLS: It is.

24 BOARD MEMBER SERNA: Am I going to get the evil  
25 eye for a while around here.

1 (Laughter.)

2 BOARD MEMBER SERNA: No. Thank you, Chair  
3 Nichols. I'm very happy to report that Dr. Ayala, Alberto  
4 Ayala and I just returned from the Sacramento Metropolitan  
5 Air Quality Management District Board of Directors meeting  
6 where we publicly announced that Dr. Ayala is going to be  
7 our new Air Pollution Control Officer for the local  
8 district.

9 (Applause.)

10 CHAIR NICHOLS: Yeah. So now you can see why I  
11 set this up as I did.

12 (Laughter.)

13 BOARD MEMBER SERNA: By the way, the Chair, as  
14 soon as I sat down mouthed to me, "You're dead".

15 (Laughter.)

16 CHAIR NICHOLS: In a nice way. It was a  
17 friendly.

18 BOARD MEMBER BALMES: I'll second that.

19 (Laughter.)

20 CHAIR NICHOLS: In all seriousness, I heard the  
21 news last night, and I congratulated Dr. Ayala in person.  
22 This is a wonderful move for Sacramento, but I think also  
23 for us just in the sense that some of our very top people  
24 are now being, what shall I say, welcomed into the  
25 community --

1 (Laughter.)

2 CHAIR NICHOLS: -- of local air pollution control  
3 districts. And we will, of course, miss his contribution  
4 and leadership tremendously, but we also recognize that we  
5 have much to gain from having a person with his technical  
6 and policy expertise here close at hand in Sacramento. I  
7 know one of the reasons why he was interested in the  
8 position, and Sacramento in him, is that this area is  
9 making a very significant commitment to electric  
10 transportation and zero emission transportation. And I'm  
11 excited about the opportunity for him to help implement  
12 that vision.

13 So despite my not quite humorous --

14 (Laughter.)

15 CHAIR NICHOLS: -- comment on this, because it  
16 is -- it is a blow to us, of course, to lose somebody  
17 who's been with us for such a long time and has made such  
18 a tremendous contribution, I -- just to mention the  
19 Volkswagen episode, we really would not be where we are  
20 today without his -- without his tremendous contribution.

21 So, Alberto, we'll appropriately embarrass you  
22 later. But in the meantime, congratulations to all.

23 Thank you.

24 VICE CHAIR BERG: And Madam Chair --

25 CHAIR NICHOLS: Yes.

1 VICE CHAIR BERG: -- did he give us a six-month  
2 notice?

3 (Laughter.)

4 VICE CHAIR BERG: I mean, I'd --

5 CHAIR NICHOLS: Six years.

6 BOARD MEMBER BALMES: Yeah, six years.

7 CHAIR NICHOLS: Six years might be more  
8 appropriate. We need time for the transition.

9 Yeah, I think we have -- we have a couple weeks.

10 All right. Without further do, let's take up our  
11 next item, which is --

12 SENIOR ATTORNEY BREHLER: Chair Nichols, before  
13 we sat down, you mentioned returning to the consent  
14 calendar to make sure there was vote on that.

15 CHAIR NICHOLS: Yes, that was what I was going to  
16 say was that we would go to the consent calendar, which is  
17 the Ozone State Implementation Plan, right?

18 Okay. Great. Thank you.

19 So we have a consent -- we do have a consent  
20 calendar, Item number 17-5-2 the 2016 ozone State  
21 Implementation Plan for the Western Mojave Nonattainment  
22 Area, that's Mrs. Riordan's part of the world.

23 BOARD MEMBER RIORDAN: Yes.

24 CHAIR NICHOLS: Would you like to say anything  
25 here?

1 BOARD MEMBER RIORDAN: Just briefly. Obviously,  
2 I'd like to move approval of Resolution 17-12 which is the  
3 consent item, and thank the staff for working with us.  
4 This is a district -- or an area that is very much  
5 impacted by transport, and staff has been wonderful about  
6 working with us, and I thank you for that very much.

7 CHAIR NICHOLS: I'll take that as a motion --

8 VICE CHAIR BERG: I'll second.

9 CHAIR NICHOLS: -- and a second.

10 All in favor please say aye?

11 (Unanimous aye vote.)

12 CHAIR NICHOLS: Opposed?

13 Abstentions?

14 Great. All right. Done. Thank you.

15 Our next item is an update to an Item that we  
16 discussed last October, the PM2.5 State Implementation  
17 Plan for the San Joaquin Valley.

18 As I think everybody those by now, the San  
19 Joaquin Valley faces one of the greatest challenges in  
20 dealing with fine particles of any area in the United  
21 States. Concerted efforts by both the district and ARB  
22 are therefore critical to protect public health of the  
23 residents of the valley.

24 I'm especially pleased that we have contingent of  
25 residents from the area who are here this morning. And I

1 look forward to their input and to the Board's discussion.

2 Mr. Corey, will you please introduce this item.

3 EXECUTIVE OFFICER COREY: Yes. Thanks, Chair.

4 And as you mentioned, last October, staff  
5 presented an initial plan for the 12 microgram per cubic  
6 meter annual PM2.5 standard. Air quality modeling  
7 conducted for the Plan demonstrated that although  
8 significant mobile source reductions will continue to  
9 occur, given the magnitude of the PM2.5 challenge in the  
10 valley, these reductions would not be sufficient to meet  
11 the standard by the moderate deadline of 2021.

12 And as allowed by the Clean Air Act, the plan  
13 included a request for serious area classification with an  
14 attainment date of 2025. In October, the Board directed  
15 staff to explore opportunities for achieving further  
16 near-term reductions from both stationary and mobile  
17 sources before it acted on the plan.

18 Since then, staff has held two workshops in the  
19 valley to present the foundation -- the scientific  
20 foundation and key strategies for attainment to solicit  
21 community input. Staff have also been participating in  
22 the air district's public advisory work groups for a  
23 comprehensive 2.5 -- or rather, PM2.5 plan that will be  
24 heard by the Board later this year.

25 Staff's technical evaluation indicates that a



1 balanced approach of both directly emitted PM2.5, along  
2 with NOx reductions would provide the most effective path  
3 to attainment. In today's presentation, staff will  
4 describe near-term actions it has identified to achieve  
5 emission reductions and will also describe an overall  
6 attainment strategy for meeting both the annual and  
7 24-hour PM2.5 standards.

8           Following today's presentation, staff will  
9 continue to work with the district and stakeholders to  
10 finalize an attainment strategy that incorporates early  
11 emission reduction opportunities that will return to the  
12 Board later this year.

13           I'll now ask Webster Tasat to give the staff  
14 presentation.

15           Webster.

16           (Thereupon an overhead presentation was  
17 presented as follows.)

18           AQPSD CENTRAL VALLEY AIR QUALITY PLANNING SECTION  
19 MANAGER TASAT: Thank you, Mr. Corey. Good morning, Chair  
20 Nichols, and members of the Board.

21                               --o0o--

22           AQPSD CENTRAL VALLEY AIR QUALITY PLANNING SECTION  
23 MANAGER TASAT: Meeting PM2.5 standards is the valley's  
24 most critical air quality challenge. In today's update, I  
25 will summarize the Board's direction from last October and



1 Board's direction. Before I report on the status of  
2 efforts conducted to date, I'll provide a brief summary of  
3 PM2.5 standards the valley must address, as well as  
4 current control efforts which are providing the foundation  
5 for the overall attainment strategy.

6 --o0o--

7 AQPSD CENTRAL VALLEY AIR QUALITY PLANNING SECTION  
8 MANAGER TASAT: The Federal Clean Air Act sets out  
9 requirements for establishing air quality standards as  
10 well as plans from meeting them.

11 EPA is also required to periodically view  
12 standards to ensure that they remain protective of public  
13 health. Based on this review, EPA has established  
14 increasingly health protective PM2.5 standards. This  
15 includes both a daily standard to protect against  
16 short-term exposure, and an annual particle standard to  
17 address chronic health effects.

18 EPA first established PM2.5 standards in 1997.  
19 This included a daily standard of 65 micrograms, which the  
20 valley now meets. At the same time, EPA also established  
21 an annual standard of 15 micrograms. The valley missed  
22 its 2015 attainment deadline for this standard due to the  
23 severe weather conditions associated with the drought,  
24 which interrupted ongoing progress. As a result, the  
25 region must now develop a new plan.

1 Under the Clean Air Act, attainment must be  
2 achieved as expeditiously as possible, along with controls  
3 reducing emissions by five percent per year. The target  
4 date for meeting this standard the 2020. As new health  
5 science became available showing health impacts at lower  
6 levels, the daily standard was strengthened in 2006 to 35  
7 micrograms.

8 The Clean Air Act specifies attainment deadlines  
9 for each new standard. And areas with more severe air  
10 quality are provided more time to attain along with more  
11 stringent control requirements.

12 For the 35 microgram daily standard, these  
13 deadlines range from 2019 to 2024. Finally, in 2012, the  
14 annual standard was further strengthened to 12 micrograms  
15 with attainment required between 2021 and 2030.

16 Addressing these multiple standards is not as  
17 complicated as is sometimes described. The key is  
18 developing a comprehensive strategy rather than individual  
19 strategies for each standard, and we are working with the  
20 district on this comprehensive planning approach.

21 --o0o--

22 AQPSD CENTRAL VALLEY AIR QUALITY PLANNING SECTION  
23 MANAGER TASAT: Current ARB and District control programs  
24 are providing the foundation for the overall attainment  
25 strategy. The chart on this slide illustrates progress in

1 reducing mobile source NOx emissions, which are a key  
2 contributor to the formation of particles that make up  
3 about half of measured PM2.5 levels in the valley.

4 The chart has three major colored sections  
5 highlighting programmatic areas that have been fundamental  
6 to our success: Stringent engine standards for cars and  
7 trucks, cleaner fuels, and programs to accelerate the  
8 replacement of vehicles and engines. The diamonds  
9 indicate the start dates for key programs.

10 Since 1990, these programs have reduced NOx  
11 emissions in the valley by about 60 percent. Looking  
12 forward, emissions are projected to continue to decline an  
13 additional 50 percent through 2025, as cleaner vehicles  
14 and equipment continue to enter the fleet.

15 --o0o--

16 AQPSD CENTRAL VALLEY AIR QUALITY PLANNING SECTION  
17 MANAGER TASAT: The chart on this slide provides a similar  
18 overview, but now illustrating reductions in directly  
19 emitted PM2.5 emissions from stationary and area sources.  
20 The three major colored sections reflect district programs  
21 targeting sources of smoke, fugitive dust, and incentive  
22 programs.

23 For smoke, the District has adopted a number of  
24 rules that have been progressively strengthened over time.  
25 These rules include controls on commercial cooking

1 operations, limits on residential wood burning, and  
2 programs to manage agricultural and prescribed burning.  
3 Similarly, other regulations have reduced fugitive dust  
4 from agricultural operations, construction sites, and  
5 paved and unpaved roads. The District also operates a  
6 robust incentive program.

7 Taken together, these district programs have  
8 reduced PM2.5 emissions in the valley by nearly 40  
9 percent. Unfortunately, going forward, as these programs  
10 have now been fully implemented, emissions are projected  
11 to increase slightly as the valley's population continues  
12 to grow.

13 Meeting 2.5 standards will therefore require  
14 further enhancements to build on the success of current  
15 district programs.

16 --o0o--

17 AQPSD CENTRAL VALLEY AIR QUALITY PLANNING SECTION  
18 MANAGER TASAT: Returning now, to the Board's direction  
19 from last October, both ARB and the District have  
20 conducted considerable public outreach through workshops  
21 and work group meetings. ARB began this process with a  
22 workshop in Fresno last December, where staff presented  
23 the current science of PM2.5 in the valley, and the scope  
24 of potential approaches needed to meet the standards.

25 And last week, ARB staff held an evening

1 community meeting in Fresno to report on progress to date  
2 in developing a specific attainment strategy and to  
3 solicit feedback from valley residents and stakeholders.  
4 Approximately 40 members of the public attended the  
5 community meeting.

6           Along with ARB's outreach efforts, the District  
7 has conducted a complementary series of workshops and  
8 workgroup meetings. The District held four workshops that  
9 focused on specific elements of overall PM2.5 plan  
10 development, along with a public advisory workgroup  
11 consisting of various valley stakeholders. These meetings  
12 were also open to the public. The four workgroup meetings  
13 focused on air quality modeling, and proposed control  
14 measures. These meetings have been instrumental in  
15 identifying the near-term reductions I'll be discussing  
16 next, along with development of the comprehensive  
17 attainment strategy.

18                           --o0o--

19           AQPSD CENTRAL VALLEY AIR QUALITY PLANNING SECTION  
20 MANAGER TASAT: A diversity of sources contribute to PM2.5  
21 in the valley, representing a shared responsibility  
22 between ARB and the District. The new near-term actions  
23 identified since October on this slide, therefore target a  
24 variety of sources, which are key to effectively reducing  
25 PM2.5 levels. These near-term actions represent a

1 collective effort by ARB and the District to achieve  
2 additional reductions that will help advance progress  
3 towards attainment.

4           The new actions include district efforts to  
5 strengthen requirements limiting residential wood burning,  
6 enhanced control requirements for commercial charbroiling,  
7 and measures to further reduce dust emissions from  
8 agricultural operations.

9           In addition, incentive programs will further  
10 advance the deployment of cleaner technologies for trucks,  
11 tractors and other off-road equipment. ARB has also  
12 identified a new measure for heavy-duty truck smog check  
13 program to ensure trucks remain clean throughout their  
14 lifetime.

15           Finally, the District has proposed more stringent  
16 control limits for boilers, IC engines, and glass plants.

17           --o0o--

18           AQPSD CENTRAL VALLEY AIR QUALITY PLANNING SECTION  
19 MANAGER TASAT: In the next section of the presentation, I  
20 will provide additional details on these actions, as well  
21 as the benefits they provide as part of the comprehensive  
22 control strategy for all the PM2.5 standards.

23           --o0o--

24           AQPSD CENTRAL VALLEY AIR QUALITY PLANNING SECTION  
25 MANAGER TASAT: Defining an effective strategy begins with



1 understanding the sources contributing to PM2.5 throughout  
2 the year. Ambient PM2.5 levels are made up of many  
3 constituents that can either be directly emitted, such as  
4 soot and dust, or form through reactions of NOx, SOx, and  
5 ammonia. Routine measurements of these constituents are  
6 made at four sites in the valley supplemented with more  
7 extensive measurements during intensive field studies.

8           The pie chart on this slide shows the types of  
9 sources contributing to the annual average PM2.5 levels in  
10 Bakersfield, the site with the highest concentrations.  
11 This reflects concentrations representative of peak  
12 drought conditions in 2013. This year was selected as the  
13 base year for the attainment demonstration to ensure that  
14 the strategy will adequately protect public health during  
15 drought conditions that are likely to occur more  
16 frequently due to man-made climate change.

17           Carbon particles are the largest constituent  
18 accounting for about 43 percent of annual levels. Smoke  
19 from fireplaces, and wood stoves, and commercial cooking  
20 are significant sources of this carbon, along with exhaust  
21 from mobile sources.

22           Ammonium nitrate particles shown on the left  
23 account for about 37 percent with mobile sources emitting  
24 about 85 percent of the NOx that forms ammonium nitrate.  
25 Other constituents include ammonium sulfate, which comes

1 primarily from a variety of industrial sources, and  
2 fugitive dust from agricultural operations, construction  
3 activities, unpaved lots, and paved and unpaved roads.

4 Next, let's look at peak daily PM2.5 levels.

5 --o0o--

6 AQPSD CENTRAL VALLEY AIR QUALITY PLANNING SECTION  
7 MANAGER TASAT: Similar to the annual average, the highest  
8 daily PM2.5 levels typically occur in Bakersfield.

9 Highest concentrations occur during winter months when  
10 long periods without rainfall coupled with cool  
11 temperatures and stagnant winds lead to PM2.5 levels that  
12 buildup over days to weeks.

13 Peak levels modeled in 2013 were 63 micrograms  
14 per cubic meter, nearly twice the level of the daily  
15 standard.

16 While similar constituents contribute to peak day  
17 concentrations, as shown in this pie chart, the  
18 proportions are different. The cold stagnant conditions  
19 that occur during winter months are especially conducive  
20 to ammonium nitrate formation, which accounts for 51  
21 percent of PM2.5 particles. Carbon particles account for  
22 another 38 percent with enhanced contributions from  
23 residential wood burning.

24 As with the annual average, ammonium sulfate and  
25 fugitive dust particles make up the remaining mass.

1                                   --o0o--

2                   AQPSD CENTRAL VALLEY AIR QUALITY PLANNING SECTION

3   MANAGER TASAT:  The ambient measurements I just described  
4   define the key sources the attainment strategy needs to  
5   address.  Air quality modeling then helps us evaluate the  
6   most effective approaches for achieving necessary  
7   reductions.

8                   This modeling integrates air quality and  
9   emissions data along with weather patterns to predict  
10  future air quality, and identifies the magnitude and  
11  relative effectiveness of emission reductions needed for  
12  attainment.  Building from existing control program, the  
13  core elements of the attainment strategy include five  
14  focus areas, consistent with near-term actions I discussed  
15  earlier.

16                  First, approaches to prevent wood smoke impacts  
17  on peak days by curtailing wood burning levels well below  
18  the daily standard, along with incentive programs to  
19  replace older wood burning devices.

20                  Second, new controls for commercial charbroiling  
21  operations with an enhanced focus on urban on the urban  
22  areas of Bakersfield and Fresno.

23                  Third, minimizing dust from agricultural  
24  operations, as well as urban sources of dust, such as  
25  unpaved lots and parking areas as well as paved roads.

1 Fourth, aligning emission control requirements  
2 for stationary sources with the latest advances in control  
3 technologies.

4 And fifth, new measures to establish requirements  
5 for the next generation of mobile source controls, along  
6 with incentive programs to enhance the deployment of these  
7 cleaner technologies within the time frames needed for  
8 attainment within the valley.

9 In the remaining portion of the presentation,  
10 I'll provide additional details on each of these elements  
11 of the attainment strategy starting with residential wood  
12 burning

13 --o0o--

14 AQPSD CENTRAL VALLEY AIR QUALITY PLANNING SECTION  
15 MANAGER TASAT: Residential wood burning includes  
16 emissions from fireplaces and wood stoves and accounts for  
17 nearly one-third of the PM2.5 carbon particles measured on  
18 peak winter days. These smoke particles also contain  
19 toxic air contaminants.

20 The map to the right shows the distribution of  
21 daily average winter emissions from wood burning with the  
22 darker red colors indicating higher emissions. Emissions  
23 are highest in urbanized areas, but also reflect a broad  
24 distribution throughout the valley, including in less  
25 densely populated areas.

1 Reducing the localized impact of wood burning can  
2 provide significant health benefits. A recent study found  
3 that reductions in wood smoke from District programs to  
4 curtail wood burning had measurable health benefits.

5 This study showed that hospitalization rates for  
6 heart disease declined over 15 percent since  
7 implementation of the District's wood burning curtailment  
8 program. Reductions in wood burning through curtailment  
9 programs and incentive programs for cleaner devices  
10 provides one of the most cost effective approaches to  
11 achieving significant air quality benefits. These  
12 programs also provide important co-benefits by reducing  
13 exposure to air toxics as well as black carbon.

14 --o0o--

15 AQPSD CENTRAL VALLEY AIR QUALITY PLANNING SECTION  
16 MANAGER TASAT: Building on these efforts, new actions  
17 include continued replacement of older wood stoves and  
18 fireplaces with cleaner devices. The District's Burn  
19 Cleaner grant program has assisted valley residents  
20 funding over 12,000 replacements to date.

21 Over 75 percent of these have been to non-wood  
22 burning devices. Continued funding for this program will  
23 be important in supporting ongoing transition from wood  
24 burning. Other actions include consideration of expanding  
25 the winter wood burning curtailment season beyond the

1 current November through February time frame, and  
2 mandatory replacement of wood burning devices when homes  
3 are sold or remodeled.

4 Finally, ARB staff has discussed with the  
5 District the need for strengthening the District's  
6 curtailment program to prevent all burning on days with  
7 concentrations greater than 20 micrograms to prevent the  
8 build up of wood smoke that could lead to exceedances of  
9 the daily standard.

10 This would eliminate provisions in the current  
11 rule that allow certain wood stoves to burn when  
12 concentrations are above the standard, as well as  
13 wood-burning devices outside of urban areas.

14 --o0o--

15 AQPSD CENTRAL VALLEY AIR QUALITY PLANNING SECTION  
16 MANAGER TASAT: Moving next to commercial charbroiling,  
17 which is responsible for 20 to 25 percent of PM2.5 carbon  
18 particles year-round. The map on the right side of this  
19 slide shows the spatial distribution of charbroiling  
20 emissions. As shown by the darker red colors, these  
21 emissions are concentrated in more populated urbanized  
22 areas of the valley, which can create localized health  
23 impacts. Emissions from commercial charbroiling are also  
24 continuing to grow along with the valley's population.

25 The District has required controls for

1 chain-driven charbroilers for a number of years. However,  
2 under-fired charbroilers which are not currently regulated  
3 account for the majority of emissions. Effective control  
4 technologies for under-fired charbroilers now become  
5 available and have recently been demonstrated at one  
6 location of a national chain in the valley. Based on the  
7 success, these control technologies are now being  
8 installed at the chain's other valley locations.

9 --o0o--

10 AQPSD CENTRAL VALLEY AIR QUALITY PLANNING SECTION  
11 MANAGER TASAT: Proposed new actions would therefore  
12 require installation of controls for under-fired  
13 charbroilers in new larger restaurants throughout the  
14 valley. These control technologies can reduce emissions  
15 by 75 to 85 percent.

16 While the costs of -- while the costs of these  
17 technologies have been decreasing, installation costs  
18 could offset through incentive funding. The District is  
19 currently evaluating potential mechanisms for generating  
20 funding to support this effort.

21 In addition to requirements for larger  
22 restaurants valley-wide, ARB staff is suggesting a  
23 strategic focus on retrofits for additional restaurants in  
24 the Bakersfield and Fresno urban areas, which would  
25 provide additional benefits in the two regions of the

1 valley with the highest PM2.5 levels. ARB staff estimates  
2 this would affect about a third of the restaurants in  
3 these two cities.

4 Focused retrofits in these two areas would reduce  
5 localized impacts. And recent research suggests the  
6 control technologies would also reduce toxic emissions.

7 --o0o--

8 AQPSD CENTRAL VALLEY AIR QUALITY PLANNING SECTION  
9 MANAGER TASAT: Although the contribution of fugitive dust  
10 to PM2.5 has typically been small, the drier conditions  
11 associated with droughts can increase dust emissions.  
12 Therefore, the district has proposed several new fugitive  
13 dust measures. These include replacement of almond  
14 harvesters with new technologies that significantly reduce  
15 the dust produced during almond harvesting, and updating  
16 the valley's Conservation Management Practices regulation  
17 to include additional dust mitigation measures.

18 In addition, ARB staff has identified the need to  
19 evaluate opportunities for reducing emissions from urban  
20 dust sources, such as unpaved open areas, unpaved parking  
21 lots, and paved road dust, particularly in the Bakersfield  
22 area.

23 --o0o--

24 AQPSD CENTRAL VALLEY AIR QUALITY PLANNING SECTION  
25 MANAGER TASAT: The District has also proposed a number of



1 new measures to establish lower limits for other  
2 stationary sources. These reflect ongoing advancements in  
3 stationary source control technologies that are now  
4 feasible and cost effective. Specific measures include  
5 electrifying agricultural internal combustion engines,  
6 establishing lower NOx limits for non-ag stationary  
7 internal combustion engines, steam generators and boilers,  
8 installing ultra-low NOx flare technologies, and  
9 establishing lower NOx and SOx limits for glass plants.

10 --o0o--

11 AQPSD CENTRAL VALLEY AIR QUALITY PLANNING SECTION  
12 MANAGER TASAT: As the primary corridor for transportation  
13 through the State, emission reductions from cars, trucks,  
14 and other mobile sources will have substantial benefits in  
15 the valley. While the current control program will  
16 continue to provide significant ongoing emission  
17 reductions, further reductions will be a key element of  
18 the valley's attainment strategy, as well as part of a  
19 broader effort to transform the transportation sector.

20 These further reductions reflect a comprehensive  
21 suite of actions. New measures in the Mobile Source  
22 Strategy adopted by the Board in March will achieve  
23 reductions through development of more stringent engine  
24 standards, especially those for heavy-duty trucks,  
25 requiring zero emission technologies in a variety of



1 for regulatory action as backstop. Incentive funding has  
2 achieved over nine tons per day of NOx reduction in 2017,  
3 and met the SIP goal.

4 In addition, the district and the ag industry are  
5 working to implement a new tractor trade-up program to  
6 replace the oldest tractors with a cleaner used model.

7 While incentive funding will be an important  
8 element going forward, a potential backstop rule could  
9 serve as an overall emission reduction target, while at  
10 the same time acting as a catalyst for attracting  
11 additional near-term investments.

12 --o0o--

13 AQPSD CENTRAL VALLEY AIR QUALITY PLANNING SECTION  
14 MANAGER TASAT: ARB staff has modeled the benefits of the  
15 measures I've discussed in today's presentation coupled  
16 with the significant reductions that will continue to  
17 accrue from current control programs as part of a  
18 comprehensive attainment strategy.

19 This slide highlights predicted peak daily PM2.5  
20 concentrations expected through implementation of the  
21 proposed measure. The bar to the left indicates 2013  
22 PM2.5 levels in Fresno. The bar to the right shows the  
23 predicted future concentration with implementation of the  
24 measures identified to date.

25 All sites, with the exception of this one

1 monitoring site in Fresno, are projected to meet the  
2 24-hour standard. As can be seen in the chart, the  
3 proposed strategy provides for significant reductions in  
4 both ammonium nitrate and carbon, and brings Fresno within  
5 two micrograms of attaining the standard.

6 --o0o--

7 AQPSD CENTRAL VALLEY AIR QUALITY PLANNING SECTION  
8 MANAGER TASAT: This next slide shows a similar analysis,  
9 but now for the annual standard. The proposed strategy  
10 also provides for significant progress in reducing annual  
11 levels, and brings almost all sites into attainment of the  
12 annual standard. The highest concentrations remain in the  
13 Bakersfield area with a predicted concentration within one  
14 microgram of the standard.

15 Again, the strategy provides for large reductions  
16 in ammonium nitrate and carbon. The measures included in  
17 the attainment strategy are ambitious and will require  
18 significant efforts to implement. However, we are  
19 encouraged by these results, and experience tells us that  
20 we can identify the further reductions that will be needed  
21 to close the small remaining attainment gap.

22 In the next few slides, I'll highlight a number  
23 of suggestions we have heard through our stakeholder  
24 outreach, as well as next steps in refining -- in further  
25 refining the strategy.



1 effort and needs to begin with additional research to  
2 improve our understanding of potential control options.

3 ARB, working with other stakeholders, is  
4 beginning a comprehensive effort to address methane  
5 emissions from dairies as part of the Short-Lived Climate  
6 Pollutant Plan. This provides an important opportunity to  
7 take a broader integrated approach to evaluate both  
8 methane and ammonium emission, and the interaction between  
9 various control approaches.

10 --o0o--

11 AQPSD CENTRAL VALLEY AIR QUALITY PLANNING SECTION  
12 MANAGER TASAT: In the coming months, ARB will continue to  
13 work with the District to refine air quality modeling and  
14 identify potential approaches to close the small remaining  
15 attainment gap. This will include evaluating how the  
16 strategies identified so far can be further refined to  
17 maximize benefits, as well as quantifying the emission  
18 reductions from several measures that have not yet been  
19 included in the modeling conducted to date.

20 ARB and the district will also be reviewing the  
21 additional suggestions provided by stakeholders to develop  
22 the final comprehensive attainment strategy necessary to  
23 meet the health based standards throughout the valley.

24 --o0o--

25 AQPSD CENTRAL VALLEY AIR QUALITY PLANNING SECTION

1 MANAGER TASAT: As we move towards completing the  
2 attainment strategy, the timing of reductions from new  
3 measures will inform the valley's expected attainment  
4 dates. Maximizing the potential for near-term reductions  
5 will be a critical element of this efforts.

6 For example, strengthened requirements for  
7 residential wood burning can begin now, along with initial  
8 requirements for char -- commercial charbroiling, although  
9 a phased approach to implementation may be needed.

10 Incentives for mobile sources can provide  
11 additional near-term reductions by accelerating the  
12 turnover to cleaner technologies. At the same time, there  
13 are significant reductions that will take some time to  
14 achieve, as full implementation of the Truck and Bus Rule  
15 occurs in 2020 to 2023 time frame.

16 Development of a heavy-duty truck I&M program  
17 would also begin in paralegal. ARB and District staff's  
18 assessment of the phase-in of the overall reductions  
19 needed for attainment therefore suggests that 2024 is the  
20 most feasible attainment date for the 24-hour standard,  
21 and 2025 for the annual standard.

22 However, as I noted above, this must be  
23 accompanied by a strong focus on achieving near-term  
24 reductions and immediate initiation of rulemaking efforts.

25 --o0o--

## 1 AQPSD CENTRAL VALLEY AIR QUALITY PLANNING SECTION

2 MANAGER TASAT: In closing, staff will continue to work  
3 with the District on development of a comprehensive  
4 attainment strategy incorporating the proposed near-term  
5 actions I've described today.

6 While the District has historically prepared  
7 separate plans for individual standards, we've been  
8 recommending an integrated planning approach and are  
9 optimistic that this can be done.

10 After district action later this summer, we will  
11 bring district planning efforts back to -- for your  
12 consideration this fall. Staff will also continue to work  
13 with the district on additional public outreach and  
14 workshops as part of this process.

15 This concludes my presentation. I would now like  
16 to invite Sheraz Gill, Director of Strategies and  
17 Incentives for the San Joaquin Valley Air Pollution  
18 Control District to provide a few remarks.

19 MR. GILL: Good morning again, Chair and members  
20 of the Board. Appreciate the presentation. We, at the  
21 Air District, would like to express our gratitude to  
22 valley residents, valley businesses, and ARB staff for  
23 participating in a very robust and effective public  
24 process over the last seven months.

25 We have made significant progress in identifying



1 control measures that move us closer to attain the PM2.5  
2 standards, but our work is not done, and we still need to  
3 identify significant additional emission reductions.

4           Although we have worked very close and well with  
5 our colleagues at ARB, we believe that maintaining a  
6 certain degree of tension, and effort to hold each other  
7 accountable between the two agencies, is healthy and needs  
8 to continue. We believe that the valley residents and  
9 valley businesses will be the real winners if both of our  
10 agencies continue to push each other and do the best that  
11 we can.

12           A balanced attainment strategy that includes  
13 stationary source measures, and mobile source measures,  
14 and asks every sector of our economy to do the best that  
15 we can will not only be effective in improving public  
16 health for the valley residents, but will also help  
17 improve economic effectiveness and feasibility by fairly  
18 distributing responsibility and cost.

19           In that spirit, I am here to ask that ARB needs  
20 to do more to reduce NOx emissions from mobile sources.  
21 We still need to work with ARB to finalize the modeling.  
22 But even if we accept for the purpose of today's  
23 discussion the current modeling results that you saw today  
24 going from 37.1 micrograms to 35 for the daily standard  
25 requires approximately another 20 tons of NOx reductions

1 per day for the daily standard. And going from 13  
2 micrograms to 12 micrograms for the annual standard  
3 requires an even greater amount of NOx emission  
4 reductions, which is still quite challenging.

5           Again, all of this is subject to final modeling  
6 and refinement, and we are continuing to work with the ARB  
7 staff to continue that effort.

8           And as we continue the public process, we will  
9 come up with a greater specificity and more details, but  
10 we would like to ask that the final plan include at least  
11 three components.

12           First, with respect to the Volkswagen settlement  
13 revenues, we ask that ARB exercise full authority and  
14 influence to ensure that they direct a significant portion  
15 of the funds to the valley. This is particularly  
16 important, given that the San Joaquin Valley is home to  
17 the top -- 20 of the top 30 disadvantaged communities in  
18 based on the CalEnviroScreen.

19           Second, we ask that in bringing this plan before  
20 your Board, that ARB explore every revenue source possible  
21 to help the valley's disadvantaged communities by helping  
22 to reduce emissions in every sector, from heavy-duty  
23 trucks and off-road equipment to reduce -- to reduce  
24 emissions from passenger vehicles, through programs such  
25 as the Enhanced Fleet Modernization Program.

1           In looking for these funds, we ask that all  
2 sources be considered, including greenhouse gas funds that  
3 could provide co-benefits in the valley's disadvantaged  
4 communities.

5           Lastly, we need to replicate our great success  
6 with respect to the agriculture tractors. In 2007, in  
7 recognition of the significant reduction needed in our  
8 attainment plan to address the 8-hour ozone standard, we  
9 worked very closely with ARB and agriculture to include an  
10 aggressive commitment in our plan to achieve five to ten  
11 tons of NOx per day by 2017, through a combination of  
12 incentives and/or regulatory approach.

13           The agriculture industry, the district, the USDA,  
14 NRCC work together on a concerted effort to generate a  
15 significant amount of funding and put together a voluntary  
16 equipment replacement incentive program that reduced more  
17 emissions years ahead of that schedule.

18           Thus far, this effort has invested over \$500  
19 million to date in public-private funding that has  
20 resulted in meeting that ten ton threshold, and way in  
21 advance getting over -- closely about 12 and a half tons  
22 of NOx per day.

23           We believe that for incentive strategies like  
24 this to work effectively, a carrot-and-stick approach is  
25 always needed. We are committed to work on -- in bringing

1 local and federal funding, and ask that the State  
2 contributing -- contribute funding as well towards this  
3 effort. But a regulatory backstop is also needed to make  
4 sure that everyone does their part and remains motivated  
5 to make it work.

6 We can work out the details as the public process  
7 continues before a backstop to work a sufficient  
8 compliance timeline will be needed to allow time to secure  
9 the funding for a project of this large scale. Our  
10 preference would be that a regulatory backstop be  
11 established and some form of contingency would -- similar  
12 to the commitment that we did in the 2007 ozone plan, or  
13 perhaps similar to commitments including the South Coast  
14 AQMD's recently adopted AQMP that focused on an incentive  
15 based strategy first.

16 In closing, as presented by ARB staff, the  
17 District has identified a long list of measures to reduce  
18 directly emitted PM2.5 emissions and NOx emissions through  
19 our extensive public process. And the District remains  
20 committed to continue to search for new opportunities and  
21 additional measures as we move forward in the public  
22 process. And we really look forward to continuing to work  
23 with ARB in this process.

24 Thank you for allowing me time to comment.

25 CHAIR NICHOLS: Thank you. And we appreciate the

1 collaboration and the progress that's been made. It's  
2 undoubtedly a better product than before. Particularly  
3 appreciate the District's willingness to step up on an  
4 increased commitment to working on stationary source  
5 measures that are under your control, and understand that  
6 ARB has a lot of work to do here as well.

7           So with that, I'd like to turn it over to the  
8 witnesses. We have a substantial list of people who have  
9 come to testified, so let's get started. The list is up  
10 on the Board, so please look at it yourselves and keep  
11 track of where you are. We have a translator here. We  
12 introduced her earlier, but I'm not sure where she is.  
13 She -- okay. Great. So, as needed, she can come forward  
14 then.

15           All right, beginning with number one, USDA. And  
16 if people would move forward in twos or threes, it's  
17 helpful just in terms of saving time as we wait for you  
18 all to come down to the front.

19           Thanks.

20           MR. FORKEY: Good morning. My name is Alan  
21 Forkey. I'm an Assistant State Conservationist for the  
22 Natural Resources Conservation Service in Davis.

23           My position is to manage farm bill program  
24 funding through Title 2 of the farm bill conservation  
25 programs. We make funding available to farmers and

1 ranchers throughout California.

2           Beginning in 2002, with additional funding made  
3 available through Title 2, we were able to expand our  
4 focus to help landowners with air quality issues. At that  
5 time, we focused primarily on replacement of uncontrolled  
6 stationary diesel combustion engines, we provided  
7 assistance to landowners who were willing to reduce their  
8 tillage operations, to reduce PM10 emissions, we promoted  
9 smart sprayer technology, road treatment, we even were  
10 providing funding for proper disposal of  
11 chemically-treated grape stakes.

12           For about the first four or five years of those  
13 farm bill dollars, we probably put five to six million  
14 dollars a year into those resource concerns addressing NOx  
15 emissions, particulate matter, and volatile organic  
16 compounds.

17           In the 2009 farm bill, our opportunities were  
18 greatly expand to include replacement of uncontrolled  
19 mobile diesel combustion engines. In that year, we  
20 received \$18 million worth of funding. We were able to  
21 partner with the San Joaquin Valley Air Pollution Control  
22 District to leverage funds totaling \$21 million to replace  
23 close to 500 uncontrolled diesel combustion engines.

24           Since that time, our funding has been  
25 considerable. When the funding was first earmarked into

1 the farm bill and made available for specifically air  
2 quality, due to the criteria that was developed and how  
3 that funding was allocated nationally, just based largely  
4 on the degree of environmental regulations being imposed  
5 upon landowners, California received about two-thirds to  
6 three-quarters of the funding.

7           Since 2009, we have replaced over 3,300  
8 uncontrolled diesel combustion engines for on-farm use  
9 statewide. About 2,600 of those have been in the San  
10 Joaquin Valley. And we've provided funding in excess of  
11 \$162 million just in our tractor replacement program.  
12 Overall, we have provided approximately \$200 million worth  
13 of funding in air quality since that time.

14           The future of this is that the 2014 farm bill was  
15 funded through 2018. We received \$21.5 million dollars in  
16 2000 --

17           CHAIR NICHOLS: Please go ahead finish.

18           MR. FORKEY: -- 21.5 million in 2017 and we're in  
19 the process of obligating those dollars, which we have to  
20 do by the end of September. It is highly likely that we  
21 will continue to receive these funds in 2018. And then  
22 depending upon what happens in the next farm bill, we will  
23 hopefully have enough funding to continue this initiative  
24 through the remainder of the next five to ten years.

25           CHAIR NICHOLS: That's impressive. Thank you. I

1 would just ask you to explain what you replaced these  
2 older vehicles with?

3 MR. FORKEY: Well, the criteria is they  
4 have to -- the old engines have to be replaced by a current  
5 year technology -- a current tier technology. So when we  
6 started in 2009, we were replacing with Tier 3 technology,  
7 and now we're replacing them with Tier 4. And it is a  
8 requirement that the old equipment must be destroyed. So  
9 we're basically taking the old tractors off the market and  
10 replacing them with cleaner -- cleaner running engines.

11 CHAIR NICHOLS: Thank you. Thank you very much.

12 MR. FORKEY: Thank you.

13 CHAIR NICHOLS: Thank you

14 MS. ADEYEYE: All right. Hi. Good morning. My  
15 name is Adenike Adeyeye. And I'm a research and policy  
16 analyst at Earthjustice, and also a steering committee  
17 member of the Central Valley Air Quality Coalition or  
18 CVAQ, where everyone is from it seems like.

19 So I would just like to say thank you so much for  
20 the presentation, for -- Sheraz, for your comments, and  
21 then also for the opportunity to speak.

22 We definitely support a lot of what ARB and the  
23 district are putting forward in these plans. We support  
24 the idea of developing requirements, in particular, for  
25 zero emission technologies, support some of the



1 recommendations from stakeholders like investing more in  
2 electrification, and electric vehicle chargers, and  
3 electrifying school buses, and small ag equipment. I  
4 think those are really important points that should be  
5 considered by your Board, and by staff moving forward.

6 And also, I should have said because everyone  
7 else is going to be speaking so extensively on, you know,  
8 the fireplace rule, charbroiling, et cetera, I'm going to  
9 focus on transportation.

10 So I think that those issues are very important  
11 to us. We look forward to working with ARB and with the  
12 District more on that. A couple of things that I wanted  
13 to point out are that we really think the focus should be  
14 on zero emission, because ARB has recognized that that is  
15 the way that we need to move forward to meet current and  
16 future air quality standards and to protect public health.

17 The -- in the rare cases where people are not  
18 able to invest in zero emission equipment, we think that  
19 ARB should focus on near-zero emission equipment with the  
20 definition of near zero being that equipment can operate  
21 for some period of miles fully zero emission.

22 We do not support moving forward with -- well,  
23 moving forward with investments in equipment that  
24 perpetuates traditional combustion technology, and that  
25 will never fully get us to zero, so investing in future

1 diesel, investing in additional natural gas doesn't really  
2 meet the requirements that California has moving forward.

3 I would also say finally that incentives are  
4 great and important, carrots and sticks are great. You  
5 need a stick to make a carrot work, and we think it's very  
6 important that ARB and the district focus on regulations  
7 that will encourage people to take advantage of incentives  
8 when they exist.

9 And we'd also like to remind you all that the  
10 Clean Air Act doesn't allow for incentives to just qualify  
11 as emission reductions for PM2.5. There's no black box  
12 here, so we really need to have the emissions in hand, and  
13 the regulations that will produce those emissions in hand  
14 when developing this plan. So to the extent that you can  
15 focus on regulations paired with incentives to advance  
16 attainment, that would be -- that would be good for public  
17 health and for meeting the Clean Air Act standards.

18 So thank you again for the opportunity to  
19 comment.

20 CHAIR NICHOLS: Thank you.

21 Janet Dietz.

22 MS. DIETZKAMEI: I'm Janet Dietzkamei. I have  
23 asthma. I live in the San Joaquin Valley, where the worst  
24 air in the United States exists. I moved there with my  
25 husband in 2003. In three years, I have asthma. I cannot

1 go outside except on days when the air quality is  
2 registered on the RAAN system as good. If I go out, I  
3 can't breathe. I start coughing. I'm unable to get an  
4 air -- a breath of air, and I struggle to breathe,  
5 something like a fish out of water.

6 I'm not the only one there. There are thousands  
7 of us that live in the San Joaquin Valley with asthma.  
8 And that population continues to grow. Children are  
9 unable to go outside. Children go to school with inhalers  
10 so they can breathe. The air is absolutely toxic. And  
11 those of us who live there suffer.

12 In the winter months when we have PM2.5, it's  
13 very high. And I am only able to go outside after it  
14 rains, and then for only about a half a day after it  
15 rains. Wood burning fills the air with PM2.5 once again.

16 I am an outdoor person. This past year, we did  
17 have more rain, but I still was only able to go out a few  
18 days during the months of March, December, January, and  
19 February. And even part of March, because then ag burning  
20 began and the air was filled with PM2.5, black carbon,  
21 that I and the other asthmatics in the San Joaquin Valley  
22 cannot breathe.

23 It's a frightening thing, because what can happen  
24 to those of us with asthma is we can die. Many of us end  
25 up in the emergency room including children. Children are

1 born -- we have many cases of underweight children being  
2 born, as if -- just as if we were all heavy smokers.

3 Children have developmental problems due to the  
4 fact that they have asthma. This is a serious situation,  
5 and it needs to be addressed urgently the strictest way we  
6 can to get to where we -- those of us with asthma can go  
7 outside and actually enjoy being outside must be done.

8 My recommendation is during the winter months, we  
9 ban burning in urban areas, absolutely ban them. That  
10 way, we can enforce if people are using their fireplaces,  
11 both inside and outside fireplaces. That would be a quick  
12 fix, and a very inexpensive fix to reduce the PM2.5 in our  
13 air.

14 CHAIR NICHOLS: Thank you.

15 MS. DIETZKAMEI: Thank you.

16 MS. ELENES: Good morning, Board members and  
17 Chair Nichols. My name is Grecia Elenes. And I'm here on  
18 behalf of Leadership Council for Justice and  
19 Accountability. Now, our organization works with over 20  
20 communities across the Central Valley, most of which are  
21 found in these low income very impacted and burdened  
22 communities that are ranked very high here in the State  
23 and even nationally.

24 And so we work with dedicated community leaders  
25 fighting together to give their families a better future

1 because they know how severe their air quality is, and  
2 they know how it impacts their families' day-to-day lives.

3 We are thankful that the ARB has stepped in and  
4 worked with the District to make sure that we are able to  
5 reach the attainment that we need for our communities to  
6 be able to thrive and succeed. And we would like to see  
7 the ARB and the District take this a step further to  
8 create more stringent regulations to further reduce PM2.5,  
9 and reduce emissions that we need to see -- we need to see  
10 stationary sources that contaminate less and be relocated  
11 nowhere near our schools, nowhere near communities,  
12 because most of these -- most of the times they're only  
13 found in low income communities of color.

14 We need to make sure that mobile sources are  
15 further regulated to make sure we have cleaner tractors,  
16 trucks, et cetera, and additionally reroute diesel trucks  
17 away from communities, so they can breathe better.

18 Last, our valley -- our valley needs these  
19 stringent regulations. As Chair Nichols mentioned, our  
20 case is very severe, and we need these to happen fast and  
21 soon to really address the concerns that the community  
22 has.

23 Lastly, I would like to thank the ARB's  
24 responsiveness. At last week's workshop in Fresno, we --  
25 there was a comment made where we requested that the

1 material be provided in Spanish. And we see that here  
2 today, so we are very grateful for that. It's a very  
3 small step, but it makes a huge difference for a lot of  
4 the members when they come to these events to feel  
5 included and be able to see the material.

6 But, yes, thank you very much. I appreciate it.

7 CHAIR NICHOLS: Thank you.

8 MR. WHITE: Hello. My name is Earl White. I'm  
9 from the Central Valley. I am -- I have interests here  
10 through good air is good for everybody. Also, I believe  
11 excitement drives the market. So as a business man, I  
12 believe the market would get help from the Board -- the  
13 Air Resource Board, because that, you know, new product --  
14 a new product line means growth for industry, means growth  
15 for the American people, and new job creations.

16 And reduction is great. Reduction since the 80s  
17 since I grew up has come a long ways. I remember seeing  
18 cars with tailpipes, you know, there's black smoke coming  
19 out. And due to regulation, this has improved the air  
20 quality of all Californians. And so, you know, it has  
21 been a good job by everybody who was involved.

22 So I'd like to say thank you for everybody who  
23 take the time out to help clean air. I think more can be  
24 done. And as a business man, I believe, through industry,  
25 we can do a large amount through distributing, you know,

1 reductions -- electric cars or, you know, more  
2 environmentally safe cars, solar power, and other green  
3 improvement initiatives.

4 Thank you and have a nice day.

5 MS. MORALES: Hi. My name is Sarhely Morales. I  
6 am from the rural part of the Fresno, and we're basically  
7 surrounded by different sources of PM2.5, which includes  
8 agricultural tractors, animal feed lots to chemical  
9 fertilizers and pesticides.

10 I want to thank you guys for regulating more the  
11 landfills and the gases that emits reducing one source of  
12 PM2.5 within like our communities. However, there's still  
13 so much sources that are affecting the health of our  
14 community and the individuals living there, including  
15 childrens, which their health is declining every day and  
16 at this moment.

17 So I urge you to regulate other sources as well  
18 and not just focused on one, and also to push forward  
19 these regulations that benefit the individuals in these  
20 communities rather than large corporations and industries.

21 So thank you.

22 CHAIR NICHOLS: Thank you.

23 MR. HELME: Hello. My name is Tom Helme. I am  
24 from a non-profit called Valley Improvement Projects in  
25 Modesto which is part of CVAQ. I also sit on the EJAC,

1 the Air District for Stanislaus County. And I want to  
2 first say that I support and appreciate all of the work  
3 done here at ARB, as well as the Air District. And I  
4 appreciate Sheraz being here and his comments, and all of  
5 the work that's done on all sides.

6 I agree that sometimes a little tension in the  
7 relationship is a good thing, and between community  
8 activists and the Air District is also a good thing too to  
9 have that tension. So I -- like I said, I appreciate all  
10 the work they do. And as we all know, there's still much  
11 more that can be done.

12 To point out something that was in the  
13 presentation a minute ago, the Air District workshops,  
14 those four public workshops that I believe I was at at  
15 least three of them, if not all four, and I don't think  
16 any of them, correct me if I'm wrong, were in the evening  
17 or weekends, at a time outside of regular working hours.

18 And as an environmental justice advocate, I try  
19 to do outreach in our environmental justice communities in  
20 Modesto and Stanislaus, and it's very hard to get people  
21 that have a regular job, Monday through Friday, you know,  
22 8:00 to 5:00, to be able to make it to a meeting that's on  
23 a Tuesday at 2:00 p.m., or a Wednesday at 10:00 a.m. or  
24 something like that.

25 And a couple of these communities, just to share



1 for an example, the airport district in Modesto is in the  
2 top one percent of disadvantaged communities, according to  
3 CalEnviroScreen. That's right next to the airport, why  
4 it's called the airport neighborhood. To the east -- to  
5 the west, you have Gallo, which includes the Gallo Glass  
6 facility. And to the north, you actually have Yosemite,  
7 which was built with a pipeline for canneries. So you  
8 constantly have the trucks coming in and out of those line  
9 of canneries all in the same neighborhood.

10           And to give you another example about in the  
11 airport district about half of the population does not  
12 have a high school diploma.

13           So I'd challenge somebody to find somebody that  
14 doesn't have a high school diploma that has a job that  
15 lets them out, you know, at 10:00 a.m. on a Wednesday to  
16 go and attend a public meeting to talk about the air  
17 quality.

18           The other environmental justice community in  
19 Stanislaus is on the west side of the county, which has a  
20 variety of emitting sources from the trucks coming in and  
21 out because of the ag industry to the growing number of  
22 distribution centers out near Patterson on the west side  
23 of the county that are more being built -- sorry, just  
24 take another couple of seconds.

25           CHAIR NICHOLS: Okay.

1 MR. HELME: -- to the trash incinerator that's  
2 also in the west side of the county, which admits just as  
3 much NOx as all of Chevron's facilities put together in  
4 the valley. More direct 2.5 than three coal plants  
5 combined, and --

6 CHAIR NICHOLS: Thank you, especially since  
7 you're reading. Could you please wind up.

8 MR. HELME: Yes, I will. Thank you I will end it  
9 there.

10 Thank you.

11 CHAIR NICHOLS: Mr. Martin.

12 MR. MARTIN: I'm Ronald Martin. I'm on the  
13 executive committee of the Tehipite Chapter of the Sierra  
14 Club in Fresno. And I'm here to encourage the Board to  
15 speed up the regulation of burning by eliminating burning.

16 As a boy, it was my chore to burn trash. I took  
17 it out to a 55 gallon drum and lit it up with a match.  
18 And then that was outlawed and that was -- that was a bad  
19 thing to do. Hikers and campers are encouraged not to  
20 burn anymore. Don't have a campfire when you go out into  
21 the wilderness. Bring a portable gas stove. As there are  
22 more and more people in California, we need to stop  
23 burning.

24 And that goes for fireplaces. It ought to be  
25 completely outlawed. That would be much easier to enforce

1 to just have no burning at all. Fireplaces are there for  
2 recreational or decorative purposes, not really for home  
3 heating. We don't need all that much home heating in the  
4 valley, which is a warm place anyway. I've gone through  
5 many Januaries with just leaving the heater completely  
6 off. I wore a coat in the house. People can do that.

7           And with climate change, it's going to be even  
8 less and less necessary to have heating with burning. And  
9 the same goes for agricultural burning, there shouldn't be  
10 any burning of agricultural waste. Now, it does take more  
11 people to chip and compost agricultural waste, but we want  
12 to create jobs. That's why President Trump was elected  
13 because people prioritize the creation of jobs. If they  
14 can create more of these jobs in the agricultural sector  
15 by eliminating burning, that will be good.

16           If the businesses can't survive because they have  
17 to pay these costs, well, any regulation will have impacts  
18 on business, maybe even driving some of them out of  
19 business. But prices may have to go up. But if people  
20 aren't willing to pay the full cost of a product including  
21 the price of clean production, then that means people  
22 really don't want it and the business shouldn't exist.

23           And as for charbroiling and restaurant burning,  
24 that needs to be controlled, possibly even eliminated in  
25 the valley. Possibly with the population we have, maybe

1 those dishes can't be enjoyed anymore, because we don't  
2 want to breathe the PM2.5.

3 PM2.5 may have killed my mother. She got  
4 pneumonia in January probably because of breathing in  
5 particles. She got over the pneumonia, but she went into  
6 decline, and by June she died. So we really do need to  
7 eliminate the PM2.5 by eliminating all the burning in the  
8 valley.

9 CHAIR NICHOLS: Thank you.

10 Dr. Balmes.

11 BOARD MEMBER BALMES: Yes. I want to take this  
12 opportunity to introduce Sara Sharpe. And I think she's  
13 brought along some folks to speak with her. Sarah --  
14 well, first of all, you've heard me talk in the past about  
15 the research that I'm involved with in Fresno in the San  
16 Joaquin Valley is funded through both NIH and EPA. It's a  
17 Children's Environmental Health Center.

18 And Sarah has been instrumental in an important  
19 component of our work, which is community outreach and  
20 translation. And, in particular, we've been working with  
21 a Magnet high school in Fresno, CART. And I think Sarah  
22 is going to mention that. Anyway, I'm very pleased to  
23 introduce Sarah Sharpe.

24 DR. SHARPE: That is me. Good morning, Chair  
25 Nichols and the Board. I know most of you. And to those

1 of you I haven't had a chance to meet yet, nice to meet  
2 you.

3 I'm from Fresno. I've been working in this field  
4 for now 10 to 15 years. I currently wear two hats, and  
5 one of them Dr. Balmes just mentioned. I will be making  
6 some comments for my other job first. So I work for  
7 Central California Asthma Collaborative as the Associate  
8 Director, along with Kevin Hamilton who is our Executive  
9 Director. And he has served in many committees for ARB  
10 and at Air District.

11 So we first wanted to thank both the Board --  
12 both the District and the ARB staff who have worked with  
13 us extensively over the last six months. I think we've  
14 seen Karen and a lot of other staff in Fresno so much this  
15 last six months. It's been fun.

16 But we -- and we agree with what Tom  
17 and Sheraz -- Sheraz has said and Tom's agreement that,  
18 you know, we -- there is a great value in holding tension  
19 between all of the different stakeholder groups.

20 We continue to request accelerated efforts for  
21 PM2.5 reductions. Even if we aren't going to meet the  
22 goals for attainment, we still want to see those  
23 reductions as soon as possible, because we know of the  
24 health impacts and the health improvements we would see if  
25 we take measures early.

1           We respectfully request that the ARB advance the  
2 timeline for Mobile Source Strategy to ensure that valley  
3 NOx targets are hit before 2023. And we are also  
4 looking -- we've been very grateful to -- for your  
5 technical expertise, but we are still requesting  
6 additional modeling about ammonia. We've seen the  
7 modeling for 30 percent reductions in ammonia. But as my  
8 Executive Director has been working for the last 10, 15  
9 years on dairy emission concerns, and the health impacts  
10 as an irritant and as a PM2.5 precursor, we really wanted  
11 to see at least the modeling for what more reductions in  
12 ammonia would get us. Even if it's not a realistic goal,  
13 we would like to see those, at least 70 percent reduction  
14 in ammonia.

15           And lastly, I think I've said this to almost  
16 everybody here, if you've ever seen me speak that we still  
17 want an ag equipment rule. We appreciate what we have  
18 gotten with incentives. I've come before this Board for  
19 many years asking for an ag equipment rule as one of the  
20 last unregulated sources of NOx that we are aware of. So  
21 we believe that it's time to start phasing in a rule, and  
22 continue moving on with incentives as we have. And we  
23 would like to also see the inventory on that.

24           So with that, I'm going to close that CCAC  
25 comment, and introduce to -- we brought two students here

1 from -- it's a Fresno Clovis school that focuses the  
2 Center on Advanced Research and Technology. And they'll  
3 talk more about their program, but that's what -- I've  
4 been working with them through the CHAPS study and through  
5 our community outreach and translation core.

6 CHAIR NICHOLS: Thank you.

7 MS. LUNA: Hello. My name is Destini Luna. I am  
8 a student at Sunnyside High and the Center for Advanced  
9 Research and Technology. My partner Sam will tell you a  
10 little bit more about that.

11 The focus of our spring semester project was to  
12 learn more about environmental issues and getting some  
13 field research while doing so. And our -- we were focused  
14 on air quality. And what made us so concerned about air  
15 quality is the fact that Samantha and I were both born and  
16 raised in Fresno and we both have asthma. And we didn't  
17 realize to the extent of the problem that it actually was  
18 for not only us, but for the rest of the San Joaquin  
19 Valley.

20 And our project was based on an experiment  
21 conducted by CHAPS in the fall semester. And it was  
22 testing -- we -- they were trying to find out where  
23 students in the Fresno metropolitan area were most exposed  
24 to black carbon. And in doing so, they tested with  
25 volunteers, which were students. They tested this

1 technology called the AMAS, and that stands for Automated  
2 Microenvironment Aerosol Sampler.

3           And what it does is draws in air and it detects  
4 the amount of black carbon that is in the surrounding  
5 areas. And what makes it different than the old  
6 technology was the fact that it was able to differentiate  
7 which microenvironment the subject is in. And basically  
8 meaning, it was able to tell whether or not the student  
9 was at school, at home, or other, which was considered  
10 transit.

11           And that means it was accounting for everywhere  
12 that was not home or school for the students. And the  
13 result was that we -- the data supported our hypothesis.  
14 Sam and I thought that transit would be the  
15 microenvironment in which we were most exposed to air  
16 pollution, specifically black carbon. And the AMAS had  
17 four different filters: One for home, one for school, and  
18 then one for transit, and one was left blank.

19           And it was quite amazing to see that we spent the  
20 least amount of time in transit. However, that is where  
21 we were most exposed to air pollution. And we spent the  
22 most time at home, which is also where we were least  
23 exposed to black carbon.

24           And I just want to invite you to continue doing  
25 what you have been doing, and keeping these regulations up



1 to par and/or better, so that we can hopefully meet the  
2 standards -- the national standards for our air quality.  
3 And I hope you would also do that through community  
4 outreach, like some of the workshops that have been done.

5 But also, like it was mentioned earlier, keep in  
6 mind most people are working from a 8:00 to 5:00 job, and  
7 it's kind of hard to come out at such a fun time.

8 Thank you.

9 CHAIR NICHOLS: Thank you. We do try to hold  
10 workshops and hearings in all areas in the evening hours  
11 when we do get out into the community.

12 So I know sometimes you have to do it during the  
13 hours that you can get officials also to participate. But  
14 we definitely that if you want to reach the community, you  
15 have to go where people are. Thank you.

16 MS. RUBIO: For those of you who do not know what  
17 CART is, it is -- it stands for Center of Advanced  
18 Research and Technology. This is a school only for  
19 juniors and seniors. And me and Destini both attend there  
20 from 8:00 -- from 7:30 to 10:30 a.m., and then we go to a  
21 different school. I attend Fresno High and she attends  
22 Edison High School.

23 MS. LUNA: Sunnyside.

24 MS. RUBIO: Sunnyside High school.

25 Sorry.

1 (Laughter.)

2 MS. RUBIO: This school allows us to take a  
3 course we're interested in, like our future career. Right  
4 now, we are both taking environmental science. Actually,  
5 Destini has finished. She's finished. She's a senior.  
6 She's graduated.

7 Through this -- through the Environmental Science  
8 Lab, we got the opportunity to work with Sarah and CHAPS,  
9 and we got to understand what is in our air and how it  
10 impacts us. And through the research that we've done, it  
11 has really brought me to understand that our air needs  
12 help.

13 That's it.

14 CHAIR NICHOLS: Thank you.

15 Questions, anybody, comments.

16 Appreciate your coming. Thank you.

17 BOARD MEMBER BALMES: I was just -- I was just  
18 going to thank Destini and Sam for nice testimony.

19 CHAIR NICHOLS: Dr. Sherriffs, you had a comment.

20 BOARD MEMBER SHERRIFFS: No, I just -- this is  
21 such a wonderful example of citizen student scientists,  
22 and thank you for coming. We won't tell your school  
23 you're here.

24 (Laughter.)

25 CHAIR NICHOLS: You should get extra credit.

1 BOARD MEMBER SHERRIFFS: I've got a doctor's  
2 excuse for you, if you need it. I've got two doctor's  
3 excuses.

4 (Laughter.)

5 CHAIR NICHOLS: Yeah, absolutely.

6 BOARD MEMBER SHERRIFFS: But wonderful  
7 experiment, very provocative. Boy, we need more things  
8 like this. Thank you.

9 BOARD MEMBER BALMES: We're actually going to use  
10 that pilot data for the next phase of our study. It was  
11 very important.

12 CHAIR NICHOLS: Great.

13 MS. MARTINEZ(through interpreter): Hello. My  
14 name is Nayamin Martinez. And I am member of CVAQ, and  
15 also a --

16 THE INTERPRETER: Excuse the interpreter. It's a  
17 very long an no acronym. CCJA.

18 MS. MARTINEZ(through interpreter): Thank you for  
19 providing an interpreter and for translating the materials  
20 in Spanish. That helps a lot.

21 The reason that I am here today is because the  
22 air contamination has affected me greatly.

23 MS. MARTINEZ: Not lately.

24 THE INTERPRETER: Greatly.

25 MR. MARTINEZ(through interpreter): I was born in

1 the City of Mexico. If you don't know about it, it is a  
2 city that has the worst air quality compared to any other  
3 place in the world. In 2000, my husband started working  
4 in Fresno, so we moved to Fresno. He worked for the  
5 University of Fresno. I was highly unaware about the air  
6 quality contamination.

7           And for 17 years later, I have a son, since the  
8 age of two, has been diagnosed with severe asthma and  
9 several allergies. Now, he does like to keep himself  
10 active. However, he is counting the days, three more  
11 years, before he can leave the City of Fresno, so he can  
12 attend a university elsewhere.

13           Now, I'm not here just for my son. This also  
14 affects three other million people who live in the Central  
15 Valley. Now, the people in Calwa in the southeast of  
16 Fresno are the people, in my opinion, who seem more  
17 affected by it.

18           Okay. And just for example, there is a glass  
19 factory in that area, there's also a distribution plant,  
20 and also an incinerator -- a biomass incinerator.

21           They bring the trees from the mountains. And I  
22 think instead of bringing the trucks, diesel trucks, and  
23 other contaminators, they should keep them up in the  
24 mountains. I think the compost should also go elsewhere,  
25 and the farmers shouldn't have to do the compost

1 in -- within the community, but outside of the community.

2 Thank you so much. And I really hope that the  
3 regulations that you impose are actually more strict in  
4 order to benefit the air quality.

5 CHAIR NICHOLS: Thank you.

6 Next person on our list Cesar?

7 Yes, here you go.

8 MR. AGUIRRE: Hello. My name is Cesar Aguirre.  
9 And I come with the CVAQ representing the Central  
10 California Environmental Justice Network. First of all,  
11 I'd like to thank you all for the helping hand you're  
12 extending, especially being a resident of Kern. In  
13 November of 2015, the Kern County Supervisors approved a  
14 blanket use of the infrastructure to oil and gas  
15 companies. In 2015, Jerry Brown -- in August of 2015,  
16 Jerry Brown fired a -- oil and gas regulators under the  
17 pressure of Occidental.

18 And during the campaign, Democrats said that they  
19 were pro fracking. And with 80 percent of the oil  
20 production of California coming out of Kern County, I  
21 would again like to say thank you for your help, because,  
22 you know, we don't have a lot of support at home, so we  
23 have to come out to other people.

24 As far as PM2.5 goes, it's affected my family.  
25 Me and my brother grew up in the Coachella Valley, and we

1 don't have any respiratory issues or problems. However,  
2 my -- we've lived here for 13 years, and that's how  
3 long -- that's how old my sister is. She, however, does  
4 have respiratory issues and several other things that we  
5 need to be careful with her about.

6 I can sympathize with people in the valley,  
7 because of my sister's situation. And I know some of you  
8 may not be able to sympathize, because you have not gone  
9 through this, but I brought testimony so that you can  
10 empathize with the people and see what they're going  
11 through.

12 One of the main problems that I saw was that  
13 people were against small producers, because producers are  
14 exempt from a lot of the regulations. One testimony that  
15 I'm bringing from a man named Francisco, who lives in a  
16 street called Nelson Court in Arvin, California.

17 He says, "I can feel -- I shouldn't be able to  
18 feel the dirt going into my nostrils when I breathe. I  
19 shouldn't be able -- or I shouldn't be scared to let my  
20 wife go out to be able to breathe this. I shouldn't be  
21 scared to wear white clothes because my nose will start  
22 dripping blood due to the dirty air. I shouldn't be  
23 scared to raise children or bring over my grandchildren to  
24 this environment".

25 This man lives near a gas storage tank. There's

1 a lot in his community. For example, there is a gas  
2 storage tank that is 200 feet from an apartment complex  
3 with over 100 families. It's next to a Clinica Sierra  
4 Vista and it's right next to a dentist office.

5           It is labeled a small producer, which means that  
6 because it makes less than 6,000 barrels a day, it is  
7 exempt from these regulations. People in the community  
8 are asking for strict regulations because of this -- for  
9 this, because, you know, they don't have anywhere else to  
10 go.

11           The second thing that was echoed in the community  
12 is buffer zones. People live right next to oil and gas  
13 production. And sometimes the diesel engines from the  
14 pumps keep people awake. So one thing they want is buffer  
15 zones as well.

16           So, yeah, I'd just like to finish with telling  
17 you guys let's focus on what we can control. I know  
18 somebody mentioned that in 2013 there was a drought and  
19 that caused a lot of problem. But also in 2013, 80  
20 billion barrels -- or 80 billion gallons of water was used  
21 in the oil wastewater pits. And those were open air. So,  
22 you know, let's focus on what we can control.

23           Thank you.

24           CHAIR NICHOLS: Thank you.

25           MS. ISLAS: Hello. Good morning. My name is

1 Angela Islas. And I am an intern at the Central  
2 California Asthma Collaborative. And I'm here  
3 representing CVAQ. And I am a future summer grad student  
4 that will be graduating this summer from the California  
5 State University of Fresno with a Bachelor's of Science  
6 degree in public health.

7 And I am here to show my full support in the  
8 collaborative planning of ARB and the District for the  
9 PM2.5 State implementation plan. And I'm honored as well  
10 to be in front of the ARB Board, as I have studied you  
11 extensively in the CSU Fresno curriculum for public  
12 health.

13 And I'm here to also mention that I am in full  
14 support to put stringent rules against mobile sources, and  
15 also ammonia emissions, especially towards chemical  
16 fertilizers and pesticides, as right now I am doing my  
17 research report on the issues with law enforcement and  
18 mitigation strategies amongst the chlorpyrifos being used  
19 in fields, and that are among farm laborers, as my parents  
20 are both farm laborers. And I, as well, have been a farm  
21 laborer myself for a short period time and have  
22 experienced just the smallest amount of what the air  
23 quality and also what chemical fertilizers and pesticides  
24 can do towards someone's health, as my father has  
25 congestive heart failure and also he has obstructive sleep



1 apnea.

2           So I'm here to show my full support. I'm still  
3 learning currently on all the air pollution regulations,  
4 as that is one of my future career paths to kind of just  
5 be able to be a part of striving to -- to fully just be  
6 able to control all of the air pollution that is currently  
7 high in the Central Valley.

8           And also, if my career path fully allows me to be  
9 a part of that road and to be able to successfully lower  
10 the air pollution in our Central Valley, I would be more  
11 than honored to just be a part of it, and also strive to  
12 build a better California and a better Central Valley.

13           Thank you.

14           MR. MENZ: Good morning, ladies and gentlemen.  
15 My name is Thomas Menz. I'm from the urban area of Fresno  
16 County. I want you to imagine for a moment that you'd  
17 boarded a flight and you were strapped into your seat.  
18 And the plane takes off, and you begin to smell smoke.  
19 And you look around and you notice that a passenger  
20 adjacent to you has lit up a cigarette. So you summon the  
21 flight attendant and you say something has to be done  
22 about this. This guy is smoking a cigarette.

23           And this is the response you receive. "Sir,  
24 we're very concerned for your health. We're going to do  
25 everything in our power. In fact, we will leave no stone

1 unturned, in our efforts to ameliorate your health  
2 concerns. But please understand that the complaint that  
3 you speak of is highly localized.

4 "So what we've done is we've installed a PM2.5  
5 monitor in one of the forward cabins as it happens, and  
6 when the ambient levels reach 20 micrograms per cubic  
7 meter of air, we will inform all of those passengers  
8 smoking cigars, unfiltered cigarettes, pipes, to  
9 extinguish their smoking devices. And when ambient levels  
10 reach 65 micrograms, then we'll ask those who are smoking  
11 low tar cigarettes, and are vaping to extinguish those as  
12 well".

13 Well, that's crazy. I mean, that's a hell of a  
14 way to run an airline, isn't it? I mean, not the worst  
15 example of airline behavior we've heard in recent news..

16 (Laughter.)

17 MR. MENZ: But nonetheless, this is not an  
18 adequate response. And yet, and yet less the analogy and  
19 the parallel is lost on some of those here, that is very  
20 much the response of those who are stewarding our flight  
21 through the filthy Fresno winter air. That's very much  
22 their response to the problems that we face as it regards  
23 residential wood burning.

24 Now, your staff has modeled that if residential  
25 wood burning were to be completely curtailed in Fresno,

1 four micrograms of reduction overall for the year, I mean,  
2 that would go all the way toward meeting this supposedly  
3 unattainable goal of the Clean Air Act. In Bakersfield, I  
4 believe it's two micrograms, which would again, you know,  
5 meet the requirements of the Clean Air Act.

6 So the banning of -- there are some things that  
7 are just so inherently bad, they're just so inherently  
8 unhealthful and harmful to other people that we ban them  
9 in public spaces. And I submit that residential wood  
10 burning, which has many of the same, you know, sort of  
11 problems with it. If you look at the constituents of that  
12 smoke, as cigarette smoke, it has no more role in our  
13 urban environment than would --

14 VICE CHAIR BERG: Your time is up sir. I'll need  
15 you to wrap-up please.

16 MR. MENZ: -- lighting up a cigarette in a public  
17 meeting place.

18 So I wish you would consider that, and I thank  
19 you.

20 VICE CHAIR BERG: Thank you.

21 MS. GALE: My name is Genevieve Gale. I work  
22 with the Central Valley Air Quality Coalition. And I also  
23 represent the Coalition for Clean Air on this PM2.5 plan.

24 I'd first like to say, wow, we've come a long  
25 way. Back in October, we were told that there was nothing

1 more that could be done, and that we just needed more  
2 time. And now, we stand here today saying that we can  
3 reach attainment, and we can do it in five to seven years.  
4 And I want to thank you all for that. This progress lies  
5 on your shoulders for refusing to approve an inadequate  
6 plan, and continuing this cycle of rejection, delay, and  
7 dirty air.

8           This progress is also thanks to your amazing  
9 staff. They have made themselves extremely accessible and  
10 willing to answer all of our questions, and we have a lot  
11 of questions. So I definitely appreciate all of the work  
12 that you have put into this.

13           I'd also like to say I, too, have done a lot of  
14 public outreach. I have gone to many a meetings in the  
15 past six -- six months. I've met with mothers in Calwa as  
16 Nayamin had described, and who have children with asthma  
17 and live in the shadow of a biomass incinerator.

18           I've also met with farm workers who are extremely  
19 concerned about open agricultural burning, and also the  
20 other things that get thrown in that pile.

21           I've also met with a pregnant woman who is very,  
22 very concerned about her unborn child, churchgoers who are  
23 concerned about the environmental racism that occurs in  
24 our cities, and a wife who had to move into the mountains  
25 because her husband can no longer live on the valley

1 floor.

2           Moving forward, I would like to say that there is  
3 still more work that needs to be done. We've gone a long  
4 way. We still have some remaining asks concerning the  
5 data. We would really like to see, as Sarah had said, the  
6 ammonia modeling, I think that's really important to see  
7 what kind of reductions we could get. We also would like  
8 to see the agricultural equipment inventory to be made  
9 public. We're really excited to hear that we've made so  
10 much progress and that incentives are working, but we  
11 would like to see the data that backs up that statement,  
12 and to see what kind of regulation could get us further.

13           And also, I would like to say that we need to  
14 include contingency measures. That has been spoken of  
15 today. It's been something that our local district has  
16 not included in many of its plans. And it's a needed part  
17 of the attainment plan. So banning burning, we know would  
18 get us there, so let's keep that in mind.

19           But in closing, I want to thank this agency for  
20 all the work that they have done, and remind you that you  
21 are our last defense. We have a district that is trying  
22 to roll back protections in the Clean Air Act, and we have  
23 a federal government that seems willing to do such a  
24 thing.

25           So we rely on you to protect the public health of

1 the valley, and I thank you for all of your work.

2 MR. FRANTZ: Hello. Tom Frantz. I'm not  
3 representing the Environmental Justice Advisory Committee  
4 for AB 32, but I am a member. But I'm representing the  
5 Central Valley Air Quality Coalition as a steering  
6 committee member, and the Kern Kaweah Chapter of the  
7 Sierra Club as an executive board member there.

8 I want to start by thanking Kurt Karperos for  
9 testifying so eloquently in Washington last month on  
10 behalf of the Clean Air Act going up against our own air  
11 district who was there to gut the Clean Air Act and make a  
12 meeting like this almost moot, you know. So thank you,  
13 Kurt, and to the Air Resources Board for continuing to  
14 insist that we make progress.

15 You have AB 197, which is both a mandate and an  
16 authority to do direct actions in places like the San  
17 Joaquin Valley to not only reduce greenhouse gases, but to  
18 get those co-benefits of things like PM2.5 and NOx  
19 reductions.

20 So I'm here to ask you to use that not just in a  
21 refinery measure, but to help us clean our air by doing  
22 something like this. In Kern County, the production of  
23 steam and boilers is one of the biggest overall stationary  
24 sources of pollution that we face.

25 It takes a massive amount of steam to get the oil

1 out of Kern County oil fields. So -- and they're burning  
2 natural gas for the most part to make that steam. You  
3 could mandate under AB 197 a 50 percent reduction in  
4 greenhouse gases from the production of steam in Kern  
5 County by 2030. And we know that solar can make steam.  
6 Solar can heat water, direct solar, concentrated solar.

7           They should immediately be transitioning to that  
8 method of making their steam, eliminating all those NOx  
9 emissions that we so badly need in that part of the  
10 valley. And we need that mandate from you, under this --  
11 in the scoping plan. And then that directly gets at this  
12 problem in a way you can't -- maybe you can't do  
13 otherwise.

14           The same with internal combustion engines that  
15 are pumping irrigation water throughout the San Joaquin  
16 Valley still. You could mandate by 2025 under AB 197 that  
17 every internal combustion engine that's within three to  
18 five hundred feet of a electrical power source convert to  
19 electricity.

20           Now, you can use incentive money initially, but  
21 there's got to be a mandate by this date by 2025. It's  
22 going to help clean our air. There are thousands of these  
23 pumps still running. Some of them old diesel engines,  
24 some of them newer cleaner natural gas. But we've got to  
25 stop the emission of the greenhouse gases, and we've got

1 to stop the NOx emission as well that come side by side.

2           So use your authority in every way you can to  
3 help us clean our air.

4           Thank you.

5           MS. WELLER: Good morning. I'm Dolores Weller.  
6 And I'm the director for the Central Valley Air Quality  
7 Coalition. I just wanted to say that I am very  
8 appreciative of the Board's direction at the October  
9 meeting. As others have stated, this is an unprecedented  
10 process. It's sort of shifted things for us, and that's  
11 why we're all here. And I think that you might be  
12 curious, you know, why are we all here instead of, you  
13 know, voicing our concerns directly to the Air District.

14           And I think that we have felt that our concerns  
15 are not addressed. And so we do look to you as sort of  
16 that safeguard to ensure that our concerns are addressed  
17 in this PM2.5 plan.

18           As others have stated, you know, we've been going  
19 through a long public process, and so we appreciate staff  
20 coming to the valley. The workshop that was held last  
21 week was in the evening, well attended, so we really  
22 appreciate staff and also addressing all of our questions  
23 throughout this planning process.

24           Something that has come out of the workshops and  
25 also our own community outreach is the -- are the issues



1 of localized impacts that others have raised, that there  
2 are -- you know, we have a strategy to reach attainment.  
3 You know, we're trying to make the monitors read well, but  
4 then there are also those impacts to local communities.  
5 And that may be, you know, small producers for oil and gas  
6 fall through the cracks. The regulations don't apply, but  
7 it's a localized impact. And so I think that's something  
8 that needs to be reconciled and possibly could be addressed  
9 in, you know, potential changes to, you know, measures  
10 that the District implements in this plan.

11 I also want to talk about the timeline. I know  
12 we're on a really short timeline here, and that your Board  
13 will be seeing a completed plan in September. So we do  
14 want to stress that we want to see a completed -- the  
15 completed modeling data in order to move forward. We  
16 have -- we outlined some measures that we wanted to see in  
17 October, and we support those that have been modeled so  
18 far with residential wood burning and charbroiling. But  
19 again, want to underscore the importance of modeling the  
20 ammonia, modeling ag burning -- a ban on ag burning or  
21 limiting ag burning against the most current data, and not  
22 2013, since we have seen a really big increase in open ag  
23 burning the last year.

24 So those are just some of the areas, but we have  
25 made many recommendations. And we think it's really

1 important to have that data to move forward to identify  
2 what are the measures that we can include in a plan, and  
3 look forward to working with ARB and the District and all  
4 of you in this process; and, again really appreciate your  
5 intervention and especially in the -- you know, the face  
6 of, you know, the new administration and our unfortunate,  
7 you know, local efforts to change the Clean Air Act, you  
8 know, having a strong SIP really demonstrates our  
9 commitment to the Clean Air Act.

10 Thank you.

11 MR. CUNHA: Good morning. I think it's morning.

12 Manuel Cunha with the Nisei Farmers League.

13 Madam Chair, and of course, Board members and staff.

14 The first thing is I wanted to again introduce  
15 myself. Manuel Cunha. I'm President of Nisei Farmers  
16 League. I also was one of the very first groups that put  
17 together the ag research team under Jan Sharpless back in  
18 1990 and '89.

19 We developed with the staff the study agency, the  
20 CRPAQS, seacoast study. And we went through that process  
21 because what we saw in some of the research was that the  
22 Sierra Nevadas by Midwest Research Institute showed that  
23 we cultivate at the Sierra Nevadas twice a year, and that  
24 cultivated alfalfa fields 12 times a year. So we knew the  
25 data was absolutely. So that's we put together the group

1 the study agencies. We spent a lot of money. It was a  
2 team effort, EPA. ARB, agriculture, San Joaquin Valley,  
3 and many other air districts.

4           The first thing is I want to say is that the  
5 numbers that we have for farm equipment was a program that  
6 Lynn Terry, and many of the staff, even Catherine  
7 Witherspoon, and others, and Dr. Lloyd, and several of  
8 your Board members said that if agriculture in the 2008  
9 SIP was able to do stuff from five to ten tons in a  
10 voluntary program for equipment, because we didn't have  
11 any concepts of how much we had out there, that if we got  
12 that, that would be incredible five to ten by 2017.

13           Today, just touching the research, it's 12.9  
14 tons, not -- they forgot about, I think, NRCS's numbers,  
15 but that's okay. I think there -- that was a number that  
16 was submitted to ARB in May of last year, and in December  
17 of 2016, and your staff agreed. Your staff agreed to that  
18 number because of cleaning it up and whatever else. But  
19 what I want to say is that we've done a great job.

20           Now, let me give some funding issues here. The  
21 first thing is that the ag industry is putting together a  
22 meeting with USDA, NRCS, Kearney Research Center, Fresno  
23 State, and many other ag groups on dealing with a Burn  
24 Conference sometime in late June, or July. There will a  
25 conference on ag burn and other burn, including the Sierra

1 Nevadas, because we have a lot of trees up there that have  
2 issues across the range.

3           Secondly is that agriculture is meeting with USDA  
4 on the Farm Bill. On the Farm Bill for NRCS, we've asked  
5 for a special project. We average 21 million from NRCS;  
6 Carl Moyer, somewhere 15 to 20 million; EPA funds through  
7 the DERA program, 118 moneys, you name it, and the  
8 industry agriculture have put over \$500 million  
9 combination since 2004, which was starting of the ag  
10 engines, okay?

11           So, in closing, I would just say that we are  
12 working with USDA right now, as we speak today, to add  
13 another ten million special grant project to the air  
14 quality project for the San Joaquin Valley on top of what  
15 we have.

16           So again, I want to thank the staff, I want to  
17 thank Mary Nichols from way back helping to put together  
18 the USDA Air Quality Board in the United States. And she  
19 was one of, I think, the first person of the  
20 representative and turned out over 200 --

21           VICE CHAIR BERG: Okay. Manuel, I let you go.  
22 Thank you.

23           MR. CUNHA: Thank you.

24           MR. ISOM: Good morning. My name is Roger Isom.  
25 I'm President of and CEO of the California Cotton Ginners

1 and Growers Association, and the Western Agricultural  
2 Processors Association.

3           A couple things that I want to leave you with  
4 today that I don't believe have been represented correctly  
5 or maybe that you just haven't been made aware of. And  
6 that is there's this discussion of the carrot and stick.  
7 The fact of the matter is is that ag has been at the table  
8 since the very beginning, and actually has not only done  
9 their part, but done more.

10           Let's talk about ag pump engines. We actually  
11 were the first ones along with ARB and the PUC to create  
12 AG-ICE, which was a special program to go above and beyond  
13 the air districts' rules and get farmers to convert to  
14 electric motors. In that first AG-ICE program, we turned  
15 over 2,000 diesel engines to electric motors, again above  
16 and beyond.

17           And today, we have with PG&E and their current  
18 general rate case, working on AG-ICE 2.0. We're trying to  
19 go after those additional engines we didn't get in the  
20 first go-round. Again, above and beyond the air  
21 district's rules.

22           The tractors have been talked about. We have  
23 been to D.C., whether it's the farm bill or DERA or to the  
24 State level, we have got the additional monies to replace  
25 those tractors. And right now, we've been at the capital

1 the last week looking at extending the bill that we  
2 carried, along with Assemblyman Arambula to get additional  
3 dollars per vehicle in the San Joaquin Valley specifically  
4 for clean air.

5 We're actually happening lobby to make sure that  
6 funding goes beyond the sunset date of 2023 out to 2032,  
7 because it's been such a successful program.

8 On CMPs, the conservation management practices,  
9 to reduce fugitive dust, when we originally set out on  
10 that plan, it was 30 -- we needed 32 tons a day of PM10  
11 reductions. We sat down and worked with farmers, with  
12 ARB, with EPA, the district, with NRCS brought experts in,  
13 and when it was all said and done, we got -- not only got  
14 compliance with the rule, we got buy in. We got buy-in  
15 from the farming community and we were actually able to  
16 get 34 tons per day of reductions.

17 But we didn't stop there, because we could have.  
18 We met the rule. We're done. We didn't. We continued  
19 research with EPA and NRCS, worked with a piece of  
20 equipment called an ag optimizer which combined operations  
21 to get additional reductions. And we've continued to add  
22 addition CMPs to our plan, again without a mandate to do  
23 so.

24 Finally, the discussion was made up about ag  
25 burning. And they're right, with the shutdown of the

1 biomass plans, we're in a crisis situation right now in  
2 the San Joaquin Valley. We have a research project right  
3 now with West Biofuels, a plant in Woodland, that would  
4 create biogas create electricity using the biogas. And we  
5 are in our second year of that doing all kinds of  
6 different ag waste from prunings, to almond shell, to  
7 cotton stocks. You name it, we've been running it through  
8 that in -- not only seeing that the technology works, but  
9 we will also have been measuring the emissions to make  
10 sure we meet any air quality mandate anywhere in  
11 California.

12           And that project is underway right now, and so  
13 far, it has been a success. So we are continual to look  
14 in all of these areas. We have a good program, and we  
15 think we can meet any kind of mandate that's out there and  
16 go above and beyond.

17           VICE CHAIR BERG: Thank you.

18           MR. KENNY: Hi. Good morning, Vice Chair Berg,  
19 members of the Board. My name is Ryan Kenny. I'm with  
20 Clean Energy. We're the nations largest provider of  
21 renewable natural gas transportation fuel. We're  
22 headquartered here in California and have 165 stations  
23 alone in the State.

24           We're talking about the horrible environmental  
25 and health problems that are happening within the San

1 Joaquin Valley today. And I wanted to just kind of focus  
2 our remedy on the 0.02 NOx low-NOx engine with renewable  
3 fuel. We're talking about PM. We're also talking about  
4 NOx, greenhouse gas emissions. We're talking about  
5 federal attainment.

6 And we believe that this is a remedy for much of  
7 what's happening in the San Joaquin valley. You're -- the  
8 ARB's mobile source strategy document does call for  
9 900,000 low NOx vehicles by the year 2031 to reach  
10 attainment. And we do believe that there is a significant  
11 gap between the goal and the reality of what's being  
12 funded right now.

13 Early next year, the 12-liter Cummins Westport  
14 0.02 NOx engine is due out, and we believe adequate  
15 funding -- incentive funding needs to be contributed  
16 towards that. It's not just about the total amount of  
17 funding, not just about the funding source, but also about  
18 the program provisions that will come before you, which  
19 includes covering the appropriate incremental cost of such  
20 an engine, and also making sure that the incremental cost  
21 as compared to diesel -- from diesel to the 0.02 NOx  
22 engine, not from natural gas -- state of natural gas.

23 Also, it's worth noting that the technology is  
24 deployable now. You have other technologies such as  
25 hybrid fuel cells, battery electric. And according to



1 ARB's technology assessment recently, those technologies  
2 in the heavy heavy-duty space, Classes 7 and 8, with a  
3 weight of 26,001 pounds and above are not due for  
4 deployment until 2030, if not later, up to 2050.

5           And there's a lot of range -- a lot of issues  
6 because of that, but that's, of course, because of ARB's  
7 technology assessment finding that.

8           It's also worth noting that cost effectiveness is  
9 worth considering. The zero emission technologies can be  
10 up to five times more expensive than a 0.02 NOx  
11 performance standard engine. So you're getting more bang  
12 for your buck by going with deployable technology today.

13           I just want to wrap-up by saying that we do  
14 believe in a technology and a fuel neutral approach, but  
15 something needs to be done today, and this technology with  
16 0.02 NOx engine with renewable fuel is, in our view, the  
17 way to go. Thank you.

18           MS. HOLMES-GEN: Good morning, Vice Chair Berg,  
19 and members. Bonnie Holmes-Gen with the American Lung  
20 Association in California. I wanted to thank you, the  
21 Board, and the staff on behalf of the American Lung  
22 Association for your hard work on digging into this  
23 challenge and developing this PM strategy for the San  
24 Joaquin Valley.

25           We understand it's tough and there's many factors

1 working against us, but it is doable, and you have proven  
2 that, and we are thrilled. So thank for doing that. It's  
3 critical that we take this goal very seriously.

4           According to our annual report, some valley  
5 communities are experiencing 40 to 50 unhealthy days of  
6 particle pollution every year in the valley, over 90  
7 unhealthy days for ozone pollution. And this is clearly  
8 unacceptable.

9           Our valley offices work with families in the  
10 valley that have multiple kids with asthma that are  
11 struggling with the health burdens and costs on a daily  
12 basis. And I know those of you who live in the valley are  
13 very familiar with this, especially our doctors.

14           We have -- and we have over 300,000 kids with  
15 asthma in the valley. And these patient voices are very  
16 powerful.

17           We believe you have the right list of tools in  
18 the toolbox now. And we need strong coordination between  
19 your Board and the local district and the local cities and  
20 counties, local jurisdictions in the valley to make this  
21 happen.

22           We strongly support a focus on zero emission  
23 across the transportation sector to get to clean air in  
24 the valley. We have a lot more work to -- we have a lot  
25 of electric options across all classes of vehicles, and

1 wanted to say specifically there's a lot of new options  
2 becoming available in the heavy-duty sector for electric.

3           Companies are investing in new electric  
4 heavy-duty technologies. For example, there's a  
5 groundbreaking next week for new electric bus  
6 manufacturing facility in Porterville. So great options  
7 are available, and we need to get to electric to fully --  
8 to get to sustainable, long-term, healthy transportation  
9 in the valley.

10           The controls on wood burning are incredibly  
11 important. We're supporting SB 563(Lara) to establish the  
12 Woodsmoke Reduction Fund. It will be pushing for  
13 additional funding in the next year to fill out that  
14 effort. There are great options for electric and cleaner  
15 home heating. Just as we have electric options in  
16 transportation, we have a great mix of new home heating  
17 options that we need to pursue and get beyond wood  
18 burning.

19           And just another note, I'm working with local  
20 governments. We hope that you will reach out and work  
21 closely with local governments to the extent possible to  
22 get them to show leadership in their local government  
23 fleets on zero emission technologies. There's a lot we  
24 can do there.

25           Lots also to say. But since I'm getting near the

1 end, I'll say thank you for your hard work on behalf of  
2 the breathers in the San Joaquin Valley and across the  
3 State. Thank you for defending the federal Clean Air Act,  
4 and moving forward with our very important authority to  
5 clean up the air.

6 On behalf of our organization, our doctors, and  
7 medical professionals, we urge you to move forward and  
8 make this plan a reality as quickly as possible.

9 MR. JATKAR: Good morning, Vice Chair Berg and  
10 members of the Board. My name is Shrayas Jatkar with  
11 Coalition for Clean Air. And I'd like to just start off  
12 by saying as somebody who is fairly new to California -  
13 I've only been here for a few years - the idea that  
14 California is this, you know, fully green, just, you know,  
15 environmentally a sound place, that notion is somewhat  
16 shattered when you start to understand the dynamics in the  
17 San Joaquin Valley and the land of extremes of California  
18 when it comes to environmental contamination and air  
19 quality and public health.

20 And of course, the extreme situation in the  
21 valley we've heard quite a bit about that with, you know,  
22 the highest PM2.5 levels in the nation. And that exposure  
23 is, of course, linked to many different chronic diseases,  
24 respiratory, as well as heart disease, premature death.  
25 And so because of that, we want to say thanks, as others

1 have, for sending the PM2.5 plan back to the valley in  
2 October of last year, so that they can search for  
3 additional measures to control emissions and achieve  
4 greater emission reductions.

5 I'll focus, as some others have, on mobile source  
6 emissions, since I'm here before the ARB and this is your  
7 purview. So we know that mobile source emissions are kind  
8 of the leading cause of NOx emissions in the valley. And  
9 so it's important to address both on-road and off-road  
10 sources of those NOx emissions.

11 And as others have said, we agree with the  
12 strategy of a mix of incentives and regulations. Those  
13 carrots become much more appetizing when there are sticks  
14 in place, as folks know. And not only rules and  
15 incentives, but, of course, enforcement which I feel like  
16 sometimes we don't talk enough about. So in terms of  
17 enforcement, we do support improving enforcement of  
18 existing diesel rules, and new ideas such as the  
19 heavy-duty Smog Check program.

20 And because heavy-duty diesel trucks alone  
21 account for nearly 40 percent of the NOx emissions, we  
22 think it's also important to address the point of low-NOx  
23 engines and make sure that there are incentives available  
24 for the deployment of those low-NOx engines, while, of  
25 course, making sure that incentive funding overall is

1 going to the cleanest technologies available across mobile  
2 source categories.

3           And so we do think that it's wise to also make  
4 sure that when we promote and support these low-NOx  
5 engines, there should be a requirement for low carbon  
6 renewable fuels. And I think it's important to point out  
7 that when the State is promoting and supporting these low  
8 carbon renewable fuels, it's important to have safeguards  
9 in place to make sure that that transition doesn't lead to  
10 additional pollution in the valley.

11           And so I'll just close by saying thank you again  
12 to the ARB. Your role is, of course, critical in making  
13 sure that we reach attainment of PM2.5 in the valley  
14 thanks.

15           CHAIR NICHOLS: Thank you.

16           Yolanda Park.

17           MS. PARK: Good. A little short.

18           (Laughter.)

19           MS. PARK: Thank you for allowing me this  
20 opportunity to speak. My name is Yolanda Park, and I am  
21 the program manager for the environmental justice program  
22 at Catholic Charities in the Diocese of Stockton.

23           I encourage the Board to seriously consider and  
24 to adopt language and policies that will promote the  
25 health of all of us living in the valley. Pope Francis

1 says in his encyclical Laudato Si, "This conversation  
2 calls for a number of attitudes, which together foster a  
3 spirit of generous care, full of tenderness".

4           If we do not have a generous compassionate  
5 spirit, we will treat the issues of the valley with  
6 indifference or contempt, and as a problem not worthy of  
7 full consideration causing any solutions to be less  
8 effective. But I am encouraged by your efforts, and I  
9 hope that you will continue pushing strongly onward.

10           The Pope says halfway measures simply delay the  
11 inevitable disaster. Our communities don't have time to  
12 wait and our children have time to wait. Therefore, do I  
13 urge you and support you to take to heart the reality of  
14 the issue to uphold stringent measures to clean up our  
15 air, and to continue working hard on our behalf.

16           On a more personal note, both my husband and I  
17 have seen our allergies and asthma get worse since moving  
18 back into the valley. We have three children, very  
19 rambunctious children, ages six months, two years, and  
20 almost four years. A young family.

21           My eldest was diagnosed with allergies within one  
22 year of moving back into the valley before age two, having  
23 had no previous signs of problems. My middle was  
24 diagnosed with asthma after he turned one, and my youngest  
25 showed signs of asthma at the age of three months and had

1 an asthma attack at five months.

2           It extremely hurts to see your children trying to  
3 do the one basic action they shouldn't have to struggle to  
4 do to see, and literally hear, them trying to breathe.  
5 It's a terrible feeling of powerlessness.

6           But you have the power to do something about it,  
7 not just for my family but for all families and all those  
8 living in this valley.

9           Thank you very much.

10          CHAIR NICHOLS: Thank you.

11          MR. BOESEL: Madam Chairman and members of the  
12 ARB, John Boesel with CalStart. We're a national  
13 non-profit organization dedicated to the development of  
14 the clean transportation technologies industry showing  
15 that we can have jobs, economic prosperity, clean air, and  
16 protect the climate.

17           I want to say that I'm very impressed with the  
18 progress that has been made to date in the San Joaquin  
19 Valley in improving the air quality. We have done it  
20 through a combination of regulation and investments and I  
21 do believe that's what's needed going forward. I do -- we  
22 do see significant synergy between both our climate  
23 reduction, greenhouse gas reduction programs, and our  
24 efforts to improve air quality. Those two are not in  
25 contrast or in conflict, but actually are in synergy.



1 I'd like to run through a few examples of that.  
2 We, about a year and a half go, with funding from the  
3 California Energy Commission, we created the San Joaquin  
4 Valley Clean Transportation Center. We now have an office  
5 in Fresno, and are very excited about the potential to do  
6 work and what we've already achieved to date.

7 We secured about \$12 million in zero emission  
8 truck and bus funding from the ARB from cap-and-trade  
9 funding. So that's -- actually, those are projects that  
10 are going into the valley. We're deploying zero emission  
11 buses and trucks to date. So we're learning where are  
12 those segments that where a zero emission technology makes  
13 sense today. So that's very encouraging.

14 We're also very encouraged by the rapid growth of  
15 the light-duty EV market in the San Joaquin Valley, that  
16 it's really taking off at a very dramatic rate. We do  
17 need to see long-term incentives put in place. And I'd  
18 like to maybe perhaps follow up with the two ARB members  
19 to the left, my left here, and talk about how we get the  
20 legislature to really understand that we need long-term  
21 incentives for EV purchases, particularly in the valley as  
22 we need to increase the incentives there.

23 I also do want to just quickly thank Dr.  
24 Sherriffs for coming to our event yesterday. Fresno  
25 County is taking leadership in the deployment of solar

1 powered EV chargers. Fresno County is the first county in  
2 the nation to deploy a network of solar-powered EV charges  
3 in 13 small towns, Mendota, Firebaugh, others that now  
4 have solar-powered EV chargers as a result of public  
5 investment, mostly local investment. Caltrans, the Energy  
6 Commission also helped out.

7 I want to say that the clean -- the trucking  
8 industry is highly fragmented and segmented. There are  
9 places where we should be pushing forward and exploring  
10 zero emission technology. I think the ARB is pursuing  
11 that on a statewide basis and should be. And we look  
12 forward to identifying those niches where zero emission  
13 technology can make sense, can be commercially viable.

14 At the same time, there will be a need for  
15 internal combustion engine technology. We're very  
16 encouraged by the development of the near-zero emission  
17 engines and the opportunity to develop renewable natural  
18 gas in the valley and to keep those transportation dollars  
19 local, to keep the investment -- the fuel coming from the  
20 valley and keeping those dollars local.

21 And I'm out of time. Let me just say that we  
22 very much look forward to working with the ARB and others  
23 to develop the investments, the future funding that's  
24 necessary to hit the 2024 target. Very encouraged by what  
25 Roger Isom said earlier about possibly now pursuing the

1 extension of both the AB 8, AB 118 program, and the Carl  
2 Moyer Program for another decade.

3 Thank you very much.

4 CHAIR NICHOLS: Thank you. Are there any other  
5 witnesses who were missed?

6 Okay. Well, this is an informational item, so  
7 there's no need to close the record. And we're not taking  
8 any formal action today, but if any Board members have any  
9 additional thoughts or questions or concerns, I would like  
10 to call on them now starting with Ms. Mitchell.

11 BOARD MEMBER MITCHELL: Me?

12 (Laughter.)

13 CHAIR NICHOLS: Yes. Judy. Judy, I'm sorry. I  
14 wasn't speaking loudly enough.

15 BOARD MEMBER MITCHELL: Thank you. Thank you  
16 very much.

17 One thing we've heard pretty dramatically from  
18 all the people in the audience is the need for incentives  
19 to convert the mobile fleet to a cleaner fleet. And I  
20 couldn't agree more this is important really for San  
21 Joaquin Valley as well as the South Coast. We've  
22 referenced carrot and stick, but the carrot really should  
23 be called very delicious Hershey's chocolate bar, because  
24 that's where we -- we need to go on this.

25 I also want to congratulate our staff and the

1 interested parties from San Joaquin Valley for working  
2 together on this -- on this plan pursuant to the Board  
3 direction, given last October, because it looks like  
4 you've accomplished a lot.

5           There's still some more work to do, I understand,  
6 with the modeling of certain things, the ag burning, and  
7 the ammonium nitrate. So I assume you'll keep working on  
8 that.

9           And I'm wondering a little bit about next steps,  
10 because if we're going to concentrate on charbroiling and  
11 the wood burning, how do we do that? We need to work  
12 closely with the Air District to -- is the plan is to  
13 strengthen their rules and their regulatory structure or  
14 what would be done?

15           DEPUTY EXECUTIVE OFFICER KARPEROS: Both for the  
16 residential wood burning and commercial cooking, those  
17 would be sectors that fall under the local air district  
18 authority to control.

19           We have done, through our modeling, an  
20 essentially a first initial bogey for how stringent the  
21 programs need to be going forward. We need to work with  
22 the Air District to further refine that modeling. For  
23 example, you heard us talk about targeting the retrofit of  
24 the commercial cooking program to the urbanized area in  
25 Fresno and Bakersfield, where we see a very, very high

1 level of cooking carbon on the filters that we measure.

2 So we can redo some refinement of that modeling  
3 as we think about what it's going to take to reach -- come  
4 all the way to attainment.

5 But it's also going to be important, given the  
6 time frame it will take to phase in these controls, that  
7 the rulemaking begin immediately. And we've suggested to  
8 the air district that we now know enough on these sectors,  
9 that the workshop process can begin in the next month or  
10 two, so that we can see sort of those come forward as full  
11 blown packages over the next six to 12 months.

12 BOARD MEMBER MITCHELL: Good. I think that's  
13 important that we keep working with the Air District to  
14 start that rulemaking process. And those are like  
15 near-term reductions that we can see pretty quickly. So I  
16 think that that's -- your attack strategy is very good,  
17 and I think that we'll see some good results from that.  
18 So thank you for the work on this.

19 CHAIR NICHOLS: Dr. Balmes.

20 BOARD MEMBER BALMES: Actually, I think Dr.  
21 Sherriffs who actually represents the San Joaquin Valley  
22 should go -- no, go first, please.

23 (Laughter.)

24 CHAIR NICHOLS: All right. I yield to your  
25 colleague on the left.

1 BOARD MEMBER SHERRIFFS: All right. So wisdom  
2 will follow my comments.

3 (Laughter.)

4 BOARD MEMBER SHERRIFFS: It's way too early to  
5 celebrate, but I am incredibly optimistic and so thrilled  
6 by the way this process has rolled out. I would not have  
7 predicted this in October. And as many others have said,  
8 yes, thanks to everybody, everybody who is in this room  
9 today, who was there in October, and especially,  
10 especially, especially thanks to the public which showed  
11 up in Fresno and made us, ARB, and us, the San Joaquin  
12 Valley Air Pollution Control District, not kick the can  
13 down the road and make the hard decisions later.

14 They don't get any easier later, and we clearly  
15 have identified some things we can do sooner, and this is  
16 all about health. And the sooner we do these things, the  
17 more benefit -- the more people benefit the sooner,  
18 benefit today. You know, we are talking hundreds of  
19 thousands premature deaths a year. These are real  
20 numbers, real people, real health care costs in terms of  
21 children asthma, ER visits, school days missed,  
22 particularly in adults premature death.

23 So this is -- this is great that we have been  
24 willing to embark on this, and everybody in the community  
25 in Fresno, everybody throughout the State. Boy, the power

1 of the public process, and the power of the public to ask  
2 questions. That's all that was done, questions were  
3 asked. And what a great process that this Board, the San  
4 Joaquin Board, stepped up to work on those answers.

5           Some thoughts. The -- we are so close, because I  
6 don't think anybody in the room was confident we could get  
7 anywhere near this close. There is an important increment  
8 left, but we are so close. We absolutely can do this.  
9 Things have been discussed and put out. We need more  
10 information. We need better science. We need better  
11 inventories to figure out how we're going to do that. But  
12 clearly, in fact, we can do it. This is doable. You  
13 know, we found the will to get this far. Amazing.

14           I would like to just -- a couple of specifics.  
15 Yeah, the funding issues. I think we need -- as the ARB  
16 Board, one of the things we need to do is, boy, every time  
17 there's any money from the VW settlement, we need to look  
18 how we can direct more of that to the San Joaquin Valley  
19 to assist with that.

20           Roger, thank you very much for your voice. I  
21 wish everybody spoke as clearly, and loudly, and  
22 articulately as you do. Thank you for that. I'm glad  
23 everybody likes carrots, vegetables. It's not just what  
24 we eat.

25           (Laughter.)

1           BOARD MEMBER SHERRIFFS: It also turns out to be  
2 so significant how our food is prepared. Oh my gosh, who  
3 would have suspected that there was so much to gain by  
4 looking at hamburgers. But again, the focus on health.  
5 Boy, charbroiling, residential burning, open burning, the  
6 carbon, these are the most direct and immediate health  
7 impacts, and we've identified ways to move it forward. So  
8 important. Yes, makes this a public health agency that it  
9 is. It's great.

10           You know, I really would echo everything Sheraz  
11 said from the San Joaquin Valley Air Pollution Control  
12 District standpoint, and, I think, need to highlight a  
13 little bit. Yes, we do need to think about some  
14 regulations. And I don't think anybody in the room really  
15 likes regulations, but we are a regulatory body, the San  
16 Joaquin Valley Air Pollution Control District is a  
17 regulatory body, and regulatory -- regulations help us get  
18 the job done.

19           Sheraz mentioned, you know, three things about  
20 regulations. One, it's a way to get credit for what we  
21 do, because we don't always get that credit when we do it  
22 through incentives, but it also helps motivate us.  
23 Absolutely, those deadlines are so important. And this  
24 whole process validates the Clean Air Act, and what a  
25 brilliant structure that was -- is.



1           And the whole issue of fairness. My farming  
2 partner and I chose to chip not burn. We pay a financial  
3 increment, and we're willing to do that. Not everybody  
4 will, and that's fine. But I do think there's an element  
5 of fairness for other people, in terms of a business, and  
6 what the expectation is, and how that's done.

7           Now, also as a physician, when I write a  
8 prescription, I am looking for the lowest effective dose.  
9 Less can help us get there more than more can. We know  
10 that. We've learned that. So that is always in the back  
11 of our minds as we think about regulations. But I think  
12 we do need to think about some and how they're going to  
13 fit in in helping us get where we need to go.

14           I do have to say one thing just because every  
15 time I come to a meeting in Sacramento, I am so excited by  
16 the possibilities. And I want to go back to the comments.  
17 Yeah, yesterday, in Fowler -- you know, these things are  
18 possible and we're moving forward. We need to keep moving  
19 forward.

20           So yesterday in Fowler we have a ribbon cutting  
21 for these free-standing solar charging stations. What a  
22 concept. Phenomenal. And thanks to CalStart, thanks to  
23 the Energy Commission, thanks to the San Joaquin Valley  
24 Air Pollution Control District putting time and money into  
25 these things to get this thing going. What an incredible

1 demonstration.

2           So next week, there's going to be a ribbon  
3 cutting in Porterville, and ARB can take a lot of credit  
4 for making this happen, because Porterville, the community  
5 has made a commitment to fully electrify their transit  
6 system.

7           Fantastic. Next week, in Fresno, hopefully we  
8 can find a room at the Air District, we're going to have a  
9 demonstration of an all-electric farm tractor. Wow. Yes.  
10 You know the technology is there. It is moving forward.  
11 And one of the comments I made yesterday at the ribbon  
12 cutting is I pointed to my all-electric car, and the  
13 all-electric car that came from Los Angeles on one charge,  
14 and it was not a Tesla.

15           (Laughter.)

16           BOARD MEMBER SHERRIFFS: Okay. So this is out  
17 there. It's growing. It's getting ess expensive. And I  
18 said take a picture, because those are model Ts. And in  
19 20 years, we're going to be astonished that people were  
20 driving those things, how primitive they were.

21           So forward. Thank you.

22           CHAIR NICHOLS: Thank you.

23           Dr. Balmes and then Supervisor Serna.

24           BOARD MEMBER BALMES: Thank you, Chair Nichols.

25           BOARD MEMBER SERNA: Thank you --

1 CHAIR NICHOLS: Dr. Balms.

2 BOARD MEMBER SERNA: Sorry.

3 BOARD MEMBER BALMES: I'll take the ball passed  
4 by my fellow physician about effective dose -- lowest  
5 effective dose. I also want to apply that to public  
6 health. So the lowest dose of air pollution means the  
7 limited -- limitation of the adverse health effects.

8 And I also want to thank those who testified  
9 about the spirit of cooperation that I heard, for the most  
10 part, and support for that creative tension between  
11 environmental advocacy groups and the District, and  
12 between the District and our Board.

13 I think this is an example of democracy in  
14 action. It's one of the reasons I'm proud to be on this  
15 Board, because we actually pay attention to the public,  
16 and the public from all sectors, whether it's the  
17 regulated entities or the public.

18 So I've been working in Fresno in terms of air  
19 pollution and health effects since around 2000. So I have  
20 some feel for what sources contribute to the pollution and  
21 the health impacts. And I don't think I need to remind  
22 everyone that the population that's impacted by bad air  
23 quality in the San Joaquin Valley is a particularly  
24 vulnerable population.

25 You know, I was appreciative of the air pollution

1 control district mentioning the fact that there's so many  
2 disadvantaged areas, communities in the Central Valley or  
3 in the San Joaquin Valley. I've learned to separate the  
4 two -- San Joaquin Valley according to CalEnviroScreen.  
5 Remember that.

6           Sometimes leadership of each agency forgets about  
7 that. If your executive director had shown up, I would  
8 given him a piece of my mind, but I won't give you that  
9 piece. And I don't want to talk about the low-hanging  
10 fruit that's been mentioned in terms of residential wood  
11 burning, which is a big contributor to the PM especially  
12 in the winter months in the SJV, and the charcoal grilling  
13 restaurants.

14           We have other areas that we haven't spent that  
15 much time on today, but I appreciate staff's -- it's on  
16 page 12, additional stakeholder suggestions. I just want  
17 to high -- I think we need to pay attention, especially  
18 for the future, given that we're not going to achieve  
19 attainment, even with all that's on the table, all that we  
20 -- that the District agrees on with us.

21           So ag trucks are an issue. There are -- you  
22 know, I think if I remember correctly, those that are  
23 devoted to ag, transport that have less than 25,000 miles  
24 a year can be dirty diesel. And if we're talking about  
25 biomass burning, what kind of trucks are taking that

1 biomass to the biomass incinerators and power generators?  
2 It's those dirty trucks, I would imagine. I don't know  
3 that for a fact.

4 Oil drilling equipment. I know that mostly it's  
5 powered -- or more and more of it's powered by natural  
6 gas, as opposed to diesel, but, you know, whatever diesel  
7 equipment is still out there needs to be considered, but  
8 even the natural gas, if it's the cleanest available  
9 technology, is still dirty, relatively speaking. It  
10 contributes to PM.

11 And I think -- again, I don't know the numbers,  
12 but I think that there's a fair amount in Kern County  
13 that's -- of PM and NOx that are generated by oil and gas  
14 extraction equipment, not to mention the steam -- I guess  
15 that's probably powered by natural gas is the boilers for  
16 the steam that's used to frack our oil, which we've been  
17 doing for a long time way before other states have been  
18 fracking for natural gas.

19 I've studied agricultural burning, rice straw  
20 burning. I was funded by this agency before I was on the  
21 Board -- many years before I was on the Board, to study  
22 the health effects of, you know, rice straw burning. We  
23 need to get away from agriculture burning.  
24 It's -- it's -- you know, that's what they do in Indonesia  
25 and Brazil. You know, we should be able to find a cleaner

1 way of dealing with ag waste.

2           And then, you know, I want to echo something that  
3 Dolores Weller said about contingency plans. You know,  
4 we're not going to make it even with what we've got in  
5 place. So if some of our projections don't work out, we  
6 do need to have contingency plans. So I would encourage  
7 both the District and our staff to consider contingency  
8 plans.

9           And last, but not least, I've also studied  
10 ammonium nitrate funded by this agency. And while  
11 ammonium nitrate is not the -- it doesn't have the same  
12 toxicity as diesel exhaust particles, I think our current  
13 feeling that, you know, really no PM is safe PM in terms  
14 of health. So I think, given how much ammonium nitrate is  
15 contributing to the overall PM load in the SJV, air shed,  
16 I think modeling how that ammonia -- trends in that  
17 ammonia emissions and the generation of ammonium nitrate  
18 and possible ways to control that are something we should  
19 do. I don't think we're ready to put controls on ammonia  
20 at this point, but I think we are at a point where we  
21 should be modeling effective strategies in that regard.

22           So, last but not least, I did want to thank Mr.  
23 Isom for his enthusiastic embrace of efforts to have the  
24 farm community do their part in terms of improving air  
25 quality in the San Joaquin Valley.

1 Thank you.

2 CHAIR NICHOLS: Thank you.

3 Mr. Serna.

4 BOARD MEMBER SERNA: Thank you.

5 I want to start by thanking the numerous speakers  
6 that were here to provide their personal testimonies about  
7 themselves and their families in terms of the health  
8 consequence of PM2.5 in the Central Valley. We hear a  
9 number of speakers on a lot of subjects, but I can tell  
10 you both in my capacity as a local elected person and a  
11 member of this Board, that when we hear the effect that  
12 it's having on your health, I think that's -- at least for  
13 me, that's what tends to move my thinking the most at  
14 times. So I want to start by thanking those that were  
15 willing to share from that perspective.

16 I also want to say that I was incredibly  
17 impressed with, as Ms. Luna, Destini Luna, who I -- I  
18 leaned over to my colleague here and mentioned that, boy,  
19 she does a better job at speaking and making her point  
20 than a lot of adults do.

21 (Laughter.)

22 BOARD MEMBER SERNA: Well, she is an adult.  
23 She's a young adult. But again very impressed with not  
24 just Destini, but all the young people, the students, that  
25 were here to provide testimony.

1 BOARD MEMBER BALMES: Those were your federal  
2 research dollars at work by the way.

3 BOARD MEMBER SERNA: Good. At least there's  
4 something good coming out of federal government there.

5 (Laughter.)

6 BOARD MEMBER GIOIA: Shh, don't tell anybody.

7 BOARD MEMBER SERNA: Right.

8 BOARD MEMBER GIOIA: Otherwise, they'll cut it  
9 off too.

10 (Laughter.)

11 BOARD MEMBER SERNA: I do want to mention  
12 something that I brought up during my briefing. And I  
13 guess I'm looking squarely at our Chief Economist on this.  
14 It's just a -- to underscore -- I want to underscore why I  
15 think it's important, because we have a charge at this  
16 Board to not just apply the science and rule make with  
17 just an eye on public health, and just an eye on  
18 greenhouse gas reduction, and just an eye on reducing  
19 criteria pollutants, but we have a charge to do that,  
20 tempering it with what are, not just the health  
21 consequences, but the economic consequences, and the  
22 environmental justice consequences. There are a lot of  
23 moving parts to what we do.

24 But when it comes to electrifying school buses,  
25 which is something that a number of stakeholders and



1 advocates have been, I think, rightfully pressing for, in  
2 an effort to continue to reduce black carbon and PM2.5,  
3 whether it be in the Central Valley or other parts of the  
4 State of California, what I'm beginning to hear more and  
5 more from school district representatives is that -- that  
6 is having a -- while the interest continues to grow in  
7 electrifying school bus fleets, it continues to be a  
8 growing concern. I can understand why again being --  
9 holding local elected office, that that's going to have a  
10 very significant fiscal consequence for those districts.

11           And I think they're fearful that the closer we  
12 get to actually implementing that, and whether there be  
13 strict regulations, or strict regulations more so without  
14 any incentives, they're fearful that that will mean that  
15 there will have to be cuts elsewhere in those local school  
16 district budgets.

17           So I just want to make public mention of that,  
18 because I think it's a very important concept to keep in  
19 mind the closer we get to, I think, doing what everyone  
20 wants to do, including the school districts themselves,  
21 but there is a consequence to that.

22           Thanks

23           CHAIR NICHOLS: Thank you.

24           Ms. Takvorian.

25           BOARD MEMBER TAKVORIAN: Thank you. I just

1 wanted to add my appreciation to the public from the San  
2 Joaquin Valley for your incredible expertise that you've  
3 applied to this issue, and especially for your persistence  
4 and your pressure. Really, I don't know how -- that we  
5 would be here without -- without what you've done. And I  
6 am really moved by the work that you've done, and the  
7 distance that you've allowed us to go, and the place that  
8 we've landed today.

9           And I really want to commend the ARB staff. I've  
10 heard this in multiple places for the last few months,  
11 that your work with the community has really been stellar,  
12 that you've been accessible, and been responsive, and  
13 truly listened. So I've been to lots of public hearings,  
14 and there's lots of no listening going on.

15           We're checking the boxes, but I don't think  
16 that's what happened in this situation. And I'm really  
17 appreciative for that. And I appreciate the  
18 collaboration, and the cooperation, and the  
19 congratulations and gratitude that is being expressed  
20 today.

21           I think that's really generous, because I'm  
22 pretty saddened by the loss that we've had, the loss of  
23 life, the shortened lives, and the lives that have been  
24 diminished, and we've heard about those. And my  
25 colleague, I think, just talked about that as well. And

1 I -- I don't want us to forget that. So we need to do as  
2 much as we can as quickly as we can in the San Joaquin  
3 Valley and we need to use this as a lesson for every other  
4 district, and for the State of California to say we can't  
5 turn our backs on people who are suffering, because those  
6 days are lost, those lives are lost, we're not getting  
7 those back.

8           And I don't want to be overly dramatic about  
9 this, and be -- you know, be a bummer about it, but that's  
10 just true. So we just need to face that and move forward  
11 in a positive and collaborative way, but I just don't want  
12 us to gloss over what has been lost.

13           So we need to redouble our efforts. I want to  
14 make sure that the recommendations that have come forward  
15 in terms of the ammonia modeling to assess the further  
16 reductions, the inventory of the ag equipment, the  
17 assessment of the contingency measures on ag burning, on  
18 banning burning, and particularly on, I think, a principle  
19 is no incentives without regulations.

20           I mean, we have a really good model with that  
21 with a variety of other programs, that the regulations  
22 come into place, early compliance gets incentives, and I  
23 think that's the model we need to use. So I hope we can  
24 utilize that principle. And I would really love to hear  
25 from staff about that.

1           And I do want to offer my congratulations on Mr.  
2 Karperos your defense of the Clean Air Act. And I really  
3 appreciate that. And I have to say that I'm offended by  
4 anybody that's representing air quality in the State of  
5 California that isn't defending the Clean Air Act, and  
6 defending the work that we've done in the State of  
7 California.

8           So -- and again, I appreciate the work of CARB  
9 staff and the work of the public. And, you know, we've  
10 got to hold our heads up and move forward, but that -- I  
11 think we have to call that out and make sure that that's  
12 not happening within the jurisdiction and the authority  
13 that we have.

14           So I'd love to hear more about your plans on  
15 particularly the ammonia modeling and the inventory.

16           CHAIR NICHOLS: Do I see any additional hands in  
17 the air?

18           This way. You know I was going to call out  
19 Senator Florez before he raised his hand, so I just have  
20 to introduce --

21           BOARD MEMBER FLOREZ: Yeah, I did not want to  
22 repeat what everyone was going to say, so I won't.

23           CHAIR NICHOLS: I want to say though that you --

24           BOARD MEMBER FLOREZ: I won't. I won't repeat  
25 it.

1 CHAIR NICHOLS: -- you did something about the ag  
2 burning issue a long time ago, which I well remember, so  
3 that by way of introduction, you have some --

4 BOARD MEMBER FLOREZ: Thank you.

5 CHAIR NICHOLS: -- you have some credentials  
6 here.

7 BOARD MEMBER FLOREZ: Thank you, Madam Chair.  
8 Appreciate it. And everyone's comments, I'll try not to  
9 repeat it. But I would like to say a couple of things to  
10 the advocates who came down from the Central Valley. It  
11 is a trek. It has always been a trek. You wonder if  
12 Sacramento listens. And I think you're seeing progress.  
13 Slow as it may be, it is progress.

14 I want to thank the Board for putting a pause on  
15 this in Fresno. And you see what happens when you put a  
16 pause on things, sometimes good conversations, leverage, a  
17 staff that is dedicated here to really push the District  
18 in ways that I think the District would like to have  
19 skated past this in Fresno.

20 So I think really, if anything else, I want to  
21 thank our staff for being diligent and pushing, but -- so  
22 now as a Board member, let me push staff a little further,  
23 if I could.

24 So I -- you know, I definitely think we need more  
25 data, better data, transparent data. The issue of ag and

1 inventory has to be on the table, should be on the table,  
2 should be part of what we do here, and should be part of  
3 an evaluation process.

4 I also think the transparency that does not exist  
5 between our district and the San Joaquin Valley's District  
6 needs to be mended. We need to fix that. We need to  
7 figure out a better way to have more transparent data we  
8 agree on, early data, not late data, and that we're all on  
9 the same page.

10 I heard a couple of folks on both sides -- and I  
11 say both sides, because there are yeses and noes on our  
12 comment sheets. So I'm kind of wondering what we're  
13 saying no to. But it seemed to me that we should have a  
14 more transparent process. I know that's difficult. I've  
15 dealt with that District for many, many years. I  
16 understand the obstacles, but I do think we need to push.  
17 Their data will get us past a lot of the conversations of  
18 us passing -- talking past each other. So let me just  
19 make that point.

20 The second is innovation. Clearly, we need to  
21 innovate our way out of this very dire situation in the  
22 central valley. There are lots of things to innovate.  
23 Tom Frantz didn't mention things like solar ag pumps. He  
24 mentioned tractors, but there are a lot of other things  
25 that we should be looking at as part of the inventory.

1 Solar has to be a very big part. I do know that a lot of  
2 our water districts are iterating towards that. I know a  
3 lot of our farmers are moving in that direction.

4 But I do think the renewable side of this  
5 equation has to be there, particularly as you looked at  
6 your charts and it talked about the percentage of carbon.  
7 And this is a nice co-benefit here. So we always are  
8 looking for co-benefits. And I think if you look at the  
9 Central Valley, that renewable side, that carbon side, I  
10 would say that what's lacking, which a couple of people  
11 mentioned earlier is the investment in infrastructure on  
12 the EV side.

13 So no doubt that the Central Valley is short on  
14 infrastructure for charging. It's the reason people keep  
15 bringing up Volkswagen. And the reality is no one is  
16 going to buy a car in Delano, if they have to drive 30  
17 miles to the highway to charge it.

18 So the reality of the Volkswagen settlement for  
19 these communities, as we look at this chart, is more  
20 infrastructure, closer infrastructure, not drive to  
21 infrastructure, but infrastructure where you can actually  
22 plug your car in. So I would say that that kind of  
23 innovation this Board can spur, and I think we should  
24 continue to push on, particularly on the Volkswagen  
25 settlement, the Fiat settlement, and whatever else is

1 coming.

2           So I think, you know, as we start to look at  
3 these things, infrastructure is going to be very critical  
4 for the Central Valley. I applaud our farmers and our  
5 water folks for doing as much as they can with scarce  
6 resources. I would hope that we would focus on that.

7           The last thing I just want to mention is two  
8 other items. Accountability. This Board has a challenge  
9 to put together a large plan for the federal government.  
10 Whether they look at it or not, we will continue to push  
11 on that endeavor, but I do want to make sure that everyone  
12 recognizes that the people in the Central Valley, this Air  
13 Board, is part of that puzzle. It has to work as hard as  
14 anyone else.

15           So if Judy is looking at South Coast and she's  
16 making it work hard, this district has to carry its weight  
17 as well. It is all one plan, one puzzle. And when one  
18 piece doesn't do its job, it makes it a lot harder on  
19 every other representative here who has a district to make  
20 them do their job.

21           So I would say that I would not be shy in pushing  
22 this district to do its fair share. We absolutely have to  
23 make sure, because it makes it harder on every single  
24 person who's representing an air district here to do their  
25 fair share as well.



1           A follow up, I would simply say, never an issue  
2 with all of folks. As staff, you're very, responsive. I  
3 know your boxes are inundated with emails from all the  
4 Board members, but I do want to thank you for pushing on  
5 this. And particularly for Webster and Karen spending  
6 time in the valley. It's important. I'm very  
7 appreciative of the Chair going to Fresno. That created a  
8 whole new dynamic.

9           And I hope that when we go back again, we'll go  
10 to Bakersfield, which I think is ground zero for air  
11 pollution. And I'm really looking forward to some of the  
12 innovation, some of the things, believe it or not, that  
13 China is doing on the air pollution front that we could  
14 actually bring back to this Central Valley to really try  
15 to make some really lasting change on those few items that  
16 are still remaining.

17           And I'm really happy that you mentioned the word  
18 "dairy". It was too late in the presentation. It was  
19 like late in the slides. But methane has got to be our  
20 new push in the Central Valley. If we're not talking  
21 methane, I think we're really missing the boat. And I  
22 know that's very hard, but I do think that those are the  
23 kinds of things that we have to innovate our way through.

24           And thank you Madam Chair. I appreciate the  
25 time.

1           CHAIR NICHOLS: Thank you. I think the fact that  
2 we have taken as much of our day as we have on this item  
3 is indicative of the recognition that the Board has of the  
4 scope and the seriousness of the problems that the valley  
5 is facing in dealing with its public health, and also as  
6 Senator Florez just said, it's role as a generator of  
7 greenhouse gas emissions as well.

8           And I think it's helpful sometimes to me when I  
9 think about this enormous State of ours, as diverse as it  
10 is, geographically as well as -- as well as economically  
11 and ethnically that the valley is, in some sense, our  
12 underdeveloped area, and needs to be looked at from the  
13 perspective of how we really can demonstrate to the world,  
14 if we're serious about continuing our leadership in  
15 global, environmental, and climate issues, that we can  
16 have significant growth and improvements, and opportunity,  
17 and prosperity while at the same time tackling serious  
18 environmental challenges as well.

19           So this is an important step forward, but it is  
20 just one step forward, and what I know is going to be a  
21 long process. I, too, want to thank everyone who came,  
22 and for all of the hard work that people are putting into  
23 this effort.

24           And I think with that, we --

25           VICE CHAIR BERG: Madam Chair, before -- as you

1 wrap-up --

2 CHAIR NICHOLS: Yes.

3 VICE CHAIR BERG: -- could we just hear from  
4 staff on the timing going forward?

5 CHAIR NICHOLS: Oh, yes, of course. Yes.

6 VICE CHAIR BERG: And including the time frames  
7 that were asked on the modeling, time frames that we'll be  
8 able to get those done in time for the rule to come back.

9 CHAIR NICHOLS: Actually, that was what I was  
10 going to do, but it's okay.

11 (Laughter.)

12 CHAIR NICHOLS: You just had to jump in. All  
13 right. That's fine. That's okay. That's -- go ahead,  
14 please.

15 AQPSD CHIEF MAGLIANO: Okay. So, right,  
16 questions were raised about ammonia modeling. As you  
17 heard, we have done some preliminary modeling on that,  
18 looking at a 30 percent reduction, and shared that with  
19 the communities.

20 U.S. EPA has guidance on how we approach this,  
21 and they actually suggest that we look at a range between  
22 30 percent and 70 percent. So that's what we will be  
23 jumping on next is to do that 70 percent range, so we have  
24 the bracketing to understand better, what the range of  
25 benefits could be at the same time as we continue to look

1 at more of the research to better understand what  
2 different management practices might mean in terms of  
3 reducing not only ammonia, but also methane and VOCs.

4 One -- I think one of the very strong benefits  
5 that we have now is that our modeling has advanced to a  
6 point where we can really be very sophisticated and  
7 strategic in terms of how we explore potential control  
8 strategies. And so that is something that we will be  
9 working on over the next couple of months as we look at  
10 closing that gap.

11 The air district has also been developing a  
12 modeling capability. And we've been working closely with  
13 them. So that also provides of advantage of having sort  
14 of an increasingly larger staff that we can collectively  
15 bring to bear as we look at additional strategies.

16 So as was said in the presentation, this will  
17 take, you know, a fair amount of work, but there is a lot  
18 that we can do to continue to explore these strategies.  
19 And I think we see those going forward over the next few  
20 months of the summertime, and we will continue to be  
21 engaging with the District coming back into the valley to  
22 be sharing all of that additional modeling information  
23 that can help inform all of us working together on the  
24 strategy.

25 The last -- the other question that was asked was

1 about our ag inventory. This is something that we worked  
2 very closely with the ag industry a little over about ten  
3 years ago to collect really detailed information about  
4 agricultural practices, farm size, the different tier  
5 distributions. And that has been reflected in the  
6 inventories that we've been incorporating into the SIPs  
7 over the last few years, but probably something that we've  
8 been a little deficient upon is having some additional  
9 documentation that can be made available to the public  
10 and our website that really provides people with an  
11 understanding of the granularity of the information we  
12 have. So our staff is working on that right now, and we  
13 will plan to be able to make that information available  
14 too.

15 CHAIR NICHOLS: Okay. Thank you.

16 All right. I think that does it then.

17 It's 10 past 12:00, as everyone can see, and we  
18 have two items. We were scheduled to have a lunch break,  
19 and I think we should go ahead and do that, if folks are  
20 willing.

21 Okay. Great. Then we will adjourn and we will  
22 be back at 1:30 for the final part of the agenda.

23 Thank you.

24 (Off record: 12:14 p.m.)

25 (Thereupon a lunch break was taken.)

## 1 A F T E R N O O N S E S S I O N

2 (On record: 1:31 p.m.)

3 CHAIR NICHOLS: Good afternoon. We're back from  
4 our break. The next agenda item is an informational  
5 update on a draft guidance document that was recently  
6 released by ARB on overcoming barriers to zero emission  
7 and near zero emission transportation in low-income  
8 communities.

9 This is an update to the July 2016 informational  
10 Board item, in which staff introduced this project, and  
11 presented their initial identification of the types of  
12 barriers that low income residents face in accessing clean  
13 transportation options.

14 Today, staff will present additional barriers  
15 that have been identified and initial recommendations  
16 included in the draft guidance document for Board  
17 feedback, and will inform the Board on their next steps in  
18 implementing these recommendations. This all grows out of  
19 SB 350, which directed the Air Resources Board to conduct  
20 a study to better understand barriers that low income  
21 residents face in accessing zero emission and near zero  
22 emission transportation options, and provide  
23 recommendations to increase clean transportation access in  
24 low income and disadvantaged communities.

25 Transportation electrification is the cornerstone

1 of California's future in meeting both air quality and  
2 climate goals. Widespread adoption of clean  
3 transportation requires increasing the opportunities for  
4 all residents across a range of mobility options.

5           This is a topic I have to say which I find, in  
6 some ways, incredibly frustrating, because, you know, the  
7 difficulty in accessing options is being poor. You know,  
8 what more do they need to know. Why do we have to day a  
9 report on this?

10           But as it has turned out, there is a lot more  
11 under the surface of this issue, a lot more specifics, and  
12 more in the way of potential strategies that could be used  
13 than have necessarily come to the fore in the policy  
14 discussions to date.

15           And so the fact that ARB is now in a position of  
16 really having spent a lot of time out in the field doing  
17 discussions, and listening sessions, and having a chance  
18 to think through some of the ideas that have come forward  
19 actually does present us with an opportunity, I think, to  
20 injects ourselves into a discussion which, in the past,  
21 we've never really been at the table for.

22           So I'm thinking that this is something where it's  
23 really a good time now to hear an update on what's been  
24 done to date, and to start to have the Board really begin  
25 to dig into what we might want to do and be able to do to

1 move this issue forward.

2           So with that, I am going to turn the agenda over  
3 to Mr. Corey to take it from here.

4           EXECUTIVE OFFICER COREY: Thanks Chair, and  
5 that's right on point in terms of discovering some  
6 opportunities here.

7           But as you mentioned, so AB 350 tasked CARB with  
8 developing a study on the specific barriers low-income  
9 residents and disadvantaged communities face to access  
10 zero-emission and near zero-emission transportation  
11 options. The resulting draft SB 350 transportation access  
12 guidance document staff released for public review last  
13 month represents a roadmap for transportation  
14 policymakers, project administrators, community groups,  
15 and the public to identify potential gaps in access and  
16 recommendations for improvements moving forward.

17           Opportunities for increasing access address four  
18 key barriers, as you noted, affordability of clean  
19 transportation, sustainable funding, awareness of programs  
20 and incentives, and a continued understanding of the  
21 unique transportation needs in low-income and  
22 disadvantaged communities statewide.

23           Our new Assistant Executive Officer for  
24 environmental justice, Veronica Eady, and I are  
25 participating on the SB 350 multi-agency task force that





1 the importance of this effort, and how it fits into the  
2 broader context of our clean transportation programs. SB  
3 350 established, as a State priority, the reduction of  
4 greenhouse gas emissions through a promotion of various  
5 clean energy policies, including widespread transportation  
6 electrification, expanding access to clean transportation  
7 and energy programs, reducing petroleum use to meet our  
8 air quality and climate goals, and stimulating economic  
9 and environmental benefits for all Californians.

10 --o0o--

11 AIR POLLUTION SPECIALIST DUNN: SB 350 requires  
12 that the Air Resources Board examine the barriers  
13 low-income residents face in accessing clean  
14 transportation, including in disadvantaged communities, as  
15 well as develop recommendations on how to overcome these  
16 barriers.

17 SB 350 also requires the California Energy  
18 Commission to develop a complementary study that focuses  
19 on increasing access to energy efficiency, weatherization,  
20 renewable energy investments, and opportunities for small  
21 businesses located in disadvantaged communities.

22 The results of these two separate, but related,  
23 reports are really intended to provide a clear pathway to  
24 increase clean transportation and energy program access.

25 Throughout the rest of the presentation, I will

1 provide information on the draft SB 350 guidance document,  
2 including barriers and initial recommendations identified  
3 through a public process and community review, how current  
4 programs are currently increasing access to clean  
5 transportation, and next steps that lay the foundation for  
6 more widespread access to clean transportation and  
7 mobility options.

8 --o0o--

9 AIR POLLUTION SPECIALIST DUNN: Before we dive  
10 into the process that we followed to develop the draft  
11 guidance document, it's important to define what we mean  
12 by clean transportation and mobility options. Statute  
13 requires that we identify barriers to clean transportation  
14 options for low-income residents. In order to create a  
15 very broad understanding of the challenges to accessing  
16 clean transportation across the State, this review needed  
17 to include zero-emission vehicles, as well as alternative  
18 mobility options, such as biking, walking, public  
19 transportation, and car or ride sharing.

20 We worked closely with the Greenlining Institute,  
21 the Coalition for Clean Air, and Communities for a Better  
22 Environment to really determine the areas of personal  
23 transportation to be included in the draft guidance  
24 document. It became evident from these discussions that  
25 most forms of personal transportation should be included



1 current transportation options.

2 We have also been meeting with the State agencies  
3 that oversee various aspects of transportation systems on  
4 an ongoing basis. In the next few slides, I will touch on  
5 these methods in more detail.

6 --o0o--

7 AIR POLLUTION SPECIALIST DUNN: In 2016, we held  
8 two public roundtable meetings where we presented initial  
9 barrier categories and heard input from stakeholders. We  
10 were then invited to attend four community-based meetings  
11 in Huntington Park in a rural community of the San Joaquin  
12 Valley, Huron, Redwood Valley in the rural northern  
13 region, and North Richmond.

14 We participated in many Environmental Justice  
15 Advisory Committee community meetings. We held numerous  
16 one-on-one meetings with the public, and attended public  
17 meetings held by the Energy Commission.

18 Throughout these events, we were able to really  
19 engage with low-income residents and receive feedback  
20 specific to the challenges they're facing in accessing  
21 clean transportation, but also what could be done to  
22 increase access.

23 In the following slides, I will get into more  
24 detail about the organizations, as well as the State  
25 agencies, that have been really critical in the

1 development of the draft guidance document.

2 --o0o--

3 AIR POLLUTION SPECIALIST DUNN: Here are some of  
4 the organizations that we have been working with  
5 throughout this process to promote continued community  
6 engagement. At this time, we would like to thank them for  
7 their partnership and their assistance. These  
8 partnerships allowed for many opportunities to meet with  
9 low-income residents throughout the State.

10 --o0o--

11 AIR POLLUTION SPECIALIST DUNN: In addition, to  
12 engaging with low-income residents and community-based  
13 organizations, we have had ongoing meetings with many  
14 State agencies that oversee transportation projects and  
15 programs which are relevant to this study. We would like  
16 to thank these agencies for their assistance and valuable  
17 input throughout this process.

18 The people involved have been very engaged and  
19 supportive of the development of these efforts, and we see  
20 that really continuing in our coordination as a crucial  
21 step in implementing the recommendations to increase  
22 access.

23 --o0o--

24 AIR POLLUTION SPECIALIST DUNN: Specific examples  
25 of multi-agency coordination on clean transportation

1 planning efforts include the Zero-Emission Vehicle Action  
2 Plan, AB 32 Scoping Plan, Mobile Source Strategy,  
3 California Transportation Plan, Bike and Pedestrian Plan,  
4 as well as the Complete Streets Action Plan.

5 The draft guidance document acknowledges these  
6 efforts and really highlights their importance in meeting  
7 our air quality and climate change goals by increasing  
8 transportation access for all Californians.

9 --o0o--

10 AIR POLLUTION SPECIALIST DUNN: The results of  
11 these efforts are included in the draft guidance document.  
12 This document identifies the main barriers and provides a  
13 framework to address them moving forward through the  
14 initial recommendations.

15 Many of these recommendations build upon current  
16 efforts both at the State and local level, and what  
17 they're currently implementing to increase widespread  
18 access to transportation electrification, including  
19 efforts to update the AB 32 Scoping Plan and  
20 implementation of the SB 375 sustainable communities  
21 strategies.

22 These initial recommendations include steps that  
23 the legislature, the State and local planning,  
24 transportation, and air quality agencies, as well as the  
25 communities can really take advantage of to overcome

1 specific barriers and begin to formulate innovative,  
2 meaningful solutions.

3 --o0o--

4 AIR POLLUTION SPECIALIST DUNN: The key barriers  
5 described in the draft guidance document include many of  
6 the same barriers that all residents are facing to access  
7 clean transportation. But what really makes these  
8 barriers more challenging to overcome is that they are  
9 more prominent and magnified for low-income residents.

10 This is mainly due to their inability to afford  
11 more expensive advanced technology vehicles, along with  
12 living in established communities that lack the necessary  
13 transportation infrastructure, such as safe biking and  
14 pedestrian facilities.

15 There's also a lack of long-term sustainable  
16 funding that can be used to implement the recommendations  
17 to overcome these barriers.

18 In addition, there's a lack of awareness of zero  
19 and near zero-emission technologies, and an understanding  
20 of clean mobility options.

21 Finally, and probably one of the most important  
22 barriers identified is that low-income residents have  
23 transportation needs that are very unique, depending on  
24 geographic locations, and they often feel as though they  
25 are not being heard, nor are their needs being addressed





1 mobility options in communities, and ensuring that  
2 investments in clean transportation projects really  
3 maximize economic opportunities and benefits.

4           Each recommendation category includes a number of  
5 specific actions, along with a lead and supporting agency  
6 or agencies necessary to implement these actions. In the  
7 next four slides, I'll go through more detail on the four  
8 recommendation categories, along with providing some  
9 examples of current programs and projects being  
10 implemented to increase access to clean transportation.

11           --o0o--

12           AIR POLLUTION SPECIALIST DUNN: To date, the  
13 State has invested approximately \$2.7 billion of auction  
14 proceeds in sustainable communities and clean  
15 transportation. In order for all low-income residents to  
16 access clean transportation, long-term dedicated funding  
17 must be identified

18           With long-term funding, existing efforts can  
19 continue moving the State forward and towards widespread  
20 zero-emission transportation. This category includes  
21 funding current efforts, such as the Enhanced Fleet  
22 Modernization Program Plus-Up Pilot Project, financing  
23 assistance for lower income consumers, infrastructure for  
24 zero-emission vehicles, and increasing mobility options  
25 such as increasing access to car and ride sharing, safe

1 bike and walking, and providing low-cost electricity for  
2 zero-emission vehicles.

3           The first recommendation category and the one  
4 that really touches all of the recommendation in the draft  
5 guidance document is the need to increase and prioritize  
6 funding for clean transportation, as well as new funding.

7           In addition, there is a need to ensure funds are  
8 prioritized to provide direct benefits to low-income  
9 residents, including those in disadvantaged communities.

10                   --o0o--

11           AIR POLLUTION SPECIALIST DUNN: Since one of our  
12 four recommendation categories remain themes throughout  
13 the draft guidance document is to increase and prioritize  
14 funding, we want to briefly talk about new potential  
15 funding sources for clean transportation and mobility  
16 options.

17           One potential source is Senate Bill 1, the  
18 transportation funding bill, which was recently signed by  
19 the Governor. This bill includes over \$52 billion in  
20 funding over a ten-year period. About \$11.5 billion is  
21 focused on increasing funding for active transportation  
22 programs, expanding localized transit services, and  
23 infrastructure projects, all of which are included in the  
24 draft guidance documents recommendations.

25           This bill also includes \$2 billion for State and

1 local partnership programs, which reward self-help  
2 counties that have adopted local taxes or fees dedicated  
3 to improving transportation infrastructure or programs.

4           The Volkswagen settlement funds are another  
5 potential funding source, which include approximately \$1.4  
6 billion over ten years, \$800 million of which will be  
7 invested by Volkswagen, and the rest of which will be  
8 invested by the State on specific projects.

9           These funds will be invested by the State or VW  
10 in clean vehicles, programs that increase awareness of  
11 clean technologies and transportation programs, and  
12 supporting infrastructure.

13           As a result of these investments, economic  
14 benefits are anticipated across the State, such as  
15 increased access to clean transportation jobs. These  
16 topics are all included in our draft SB 350 guidance  
17 Document recommendation.

18           In addition, the California Air Resources Board  
19 has been working closely with the public utilities  
20 commission on a utility program that funds clean  
21 transportation infrastructure across the State.

22           Staff continues to review funding mechanisms to  
23 support the SB 350 effort, and wants to ensure that  
24 funding priorities maximize benefits in the shorter term.

25                           --o0o--

1           AIR POLLUTION SPECIALIST DUNN: The second  
2 recommendation category is focused on taking action to  
3 better understand transportation needs of low-income  
4 residents through prioritizing focused and expanded  
5 community-based needs assessments.

6           As I previously mentioned, one barrier identified  
7 by talking directly with residents is that they feel their  
8 transportation needs might not be well understood, and  
9 that therefore not always addressed or included when  
10 investments are made in land use or transportation  
11 planning efforts.

12           These assessments must includes resident  
13 feedback, updated or new clean vehicle regional readiness  
14 programs -- or plans, and a localized view of unmet clean  
15 transportation needs as part of regional planning.

16                           --o0o--

17           AIR POLLUTION SPECIALIST DUNN: The third  
18 recommendation category addresses the need for permanent  
19 funding to expand education and outreach efforts in  
20 low-income and disadvantaged communities to increase  
21 awareness, and exposure to clean transportation, and  
22 mobility options.

23           More specifically, there should be increased  
24 efforts to strategically plan our outreach, develop  
25 materials, and educational curriculum; as well as engage

1 and partner with community-based organizations and  
2 low-income residents; coordinate streamline our programs  
3 and information for low-income residents, such as  
4 developing region one-stop shops; and establishing  
5 community trust in new and used car buying experiences by  
6 developing a statewide network of dealerships that  
7 low-income residents can rely on to buy cleaner newer used  
8 vehicles.

9           One success sorry that I want to highlight is  
10 "Our Community CarShare Sacramento" project, which was  
11 recently launched. This is the first all-electric  
12 car-sharing project in the nation that specifically  
13 benefits low-income residents in disadvantaged  
14 communities.

15           Residents in three affordable housing units now  
16 have access to zero-emission vehicles for doctors'  
17 appointments, shopping, and other daily trips. This  
18 project also provides targeted outreach and education, so  
19 that when a consumer may be ready to purchase a vehicle,  
20 they will be aware of clean technologies and more likely  
21 to purchase a clean vehicle.

22           Without the State making investments in these  
23 types of projects, these residents are not likely to have  
24 access to clean transportation options.

25           Also, we just closed a \$6 million car-sharing

1 solicitation for fiscal year '16-'17 on Monday, and we  
2 received 14 applications which were requesting over \$20  
3 million in cap-and-trade funds. So this shows that there  
4 is a really high level of interest for zero-emission  
5 mobility projects.

6 --o0o--

7 AIR POLLUTION SPECIALIST DUNN: In order to meet  
8 broader SB 350 goals of stimulating economic benefits, the  
9 fourth recommendation category seeks to ensure access to  
10 economic opportunities are maximized for low-income  
11 residents. This would be done by prioritizing projects  
12 that provide local economic benefits for low-income  
13 residents, strategically planning our policies and  
14 investments to continue to promote affordable housing  
15 close to multiple clean transportation options, and  
16 increase connectivity between these options in support of  
17 SB 375 efforts.

18 Investments should be made to support access to  
19 good quality clean transportation jobs and workforce  
20 development opportunities, and expanded access to  
21 vocational training pre-apprenticeship and apprenticeship  
22 programs.

23 Policy -- policies should be carefully designed  
24 to ensure clean transportation and infrastructure projects  
25 minimize physical or economic displacement of residents

1 and businesses in low-income and disadvantaged  
2 communities, or adverse health impacts.

3 --o0o--

4 AIR POLLUTION SPECIALIST DUNN: To facilitate an  
5 ongoing public process, we published the guidance document  
6 draft form to allow residents and stakeholders the  
7 opportunity to review and provide feedback.

8 To date, we've received a significant level of  
9 interest and a number of comments. The comment themes  
10 have included the need to:

11 Prioritize recommendations to be tackled over the  
12 next two years. Priority recommendations will be  
13 determined through the public process, direct engagement  
14 with low-income residents, and the multi-agency task  
15 force.

16 Secondly, closely tied to AB 32 scoping plan  
17 efforts, including a stronger Link to emission reductions,  
18 reduced vehicle miles traveled, as well as health impacts.

19 Thirdly, prioritize regional one-stop shops for  
20 education and outreach in clean transportation and energy  
21 programs.

22 Fourthly, prioritize increased awareness in  
23 transportation electrification in schools and youth  
24 programs.

25 Ensure that recommendations are not too centered



1 around light-duty vehicle ownership, since there are many  
2 other mobility options that should be prioritized based on  
3 community-specific needs.

4 --o0o--

5 AIR POLLUTION SPECIALIST DUNN: Additional  
6 comment themes have included the need to:

7 Create safe active transportation options,  
8 including biking and walking, pedestrian safety, and  
9 supporting infrastructure such as sidewalks and dedicated  
10 bike facilities.

11 Also, highlight the importance of a paradigm  
12 shift away from single occupancy vehicles, including  
13 developing a loading order or a list of potential clean  
14 transportation options that can be better utilized by  
15 low-income residents. And this should focus on the  
16 solutions that best meet the localized needs.

17 Create stronger connections and promote increased  
18 access between clean transportation jobs, training,  
19 housing, and efficient land use.

20 And provide a menu of options that local  
21 communities and governments can choose from, rather than  
22 the State setting priorities and expecting them to cover  
23 all regions.

24 We appreciate the input that we have received to  
25 date and look forward to additional feedback and

1 discussions as we work to finalize the guidance document  
2 this fall.

3 --o0o--

4 AIR POLLUTION SPECIALIST DUNN: In order to  
5 ensure the recommendations included in the draft guidance  
6 document and CEC's barriers study are implemented, the  
7 Governor's office has convened a multi-agency task force  
8 comprised of leadership of State agencies implementing  
9 clean transportation and energy programs.

10 The task force is a mechanism and driver for  
11 CARB, the Energy Commission, and other State agencies to  
12 jointly and collaboratively address the barriers to clean  
13 transportation and energy access, and to establish  
14 accountability to ensure the implementation of the  
15 recommendations.

16 In addition, the task force will work to identify  
17 and prioritize actions needed in the near term to  
18 implement recommendations; as well as determine resource  
19 needs for each of the recommendations; identify long-term  
20 permanent funding sources; and identify as well as develop  
21 metrics for clean transportation and energy with input  
22 from communities to measure our success and progress over  
23 time.

24 --o0o--

25 AIR POLLUTION SPECIALIST DUNN: The next steps

1 towards supporting an ongoing process and meeting the  
2 goals of SB 350 include:

3           Continuing the public process. We will  
4 participate in additional meetings and go back to the four  
5 case study communities that we visited to let them know how  
6 their feedback was incorporated into the draft guidance  
7 document, and also determine if we properly characterized  
8 their feedback, and ask for their input on priorities for  
9 increasing clean transportation access. We will also  
10 continue collaborating with the State and local agencies  
11 as well as our stakeholders.

12           Incorporating feedback. We will incorporate the  
13 ongoing feedback that we receive on the guidance document  
14 over the next couple of months from the Board members to  
15 the State agencies, community groups, and the low-income  
16 residents, particularly on the recommendations that should  
17 really be a top priority over the next two years and then  
18 publish the final guidance document this fall.

19           Participating in the multi-agency task force. We  
20 are really excited to participate on the task force, and  
21 look at our program to see what, if any, modifications  
22 need to be made to ensure we're really leading the way and  
23 make sure that we continue to work with our sister  
24 agencies and local agencies to prioritize recommendations  
25 through this task force and emphasize priority

1 recommendations and actions in the low carbon  
2 transportation investments funding plan coming to the  
3 Board in the fall.

4 --o0o--

5 AIR POLLUTION SPECIALIST DUNN: This concludes  
6 presentation.

7 Next, we have two people who have been  
8 instrumental in this effort who would like to say a few  
9 words.

10 First, Alana Mathews, Public Advisor from the  
11 Energy Commission, will come up to the podium

12 Next, we will hear from Kate White, Deputy  
13 Secretary of Environmental Policy and Housing Coordination  
14 at the California State Transportation Agency.

15 After Alana and Kate are done speaking, we'd be  
16 more than happy to address any comments or questions from  
17 the Board.

18 Thank you.

19 CHAIR NICHOLS: Thank you.

20 MS. MATHEWS: Good afternoon. So I was here, I  
21 guess, last time there was a briefing and shared about our  
22 process. So I just want to update you. As you know, in  
23 December, the Energy Commission we published our barriers  
24 study, which is pretty much part A. And that identified  
25 broad categories of barriers, as the Chair stated, that

1 this is a lot more underneath than -- you would just think  
2 it might be an economic issue, but there are a lot of  
3 other factors that we need to take into consideration and  
4 have better policy and planning. So we identified the  
5 broad categories of barriers, and then proposed about 12  
6 recommendations. There were five principle and then seven  
7 additional recommendations.

8           So this year, the Energy Commission has really  
9 focused on trying to implement those recommendations, one  
10 of which has been the multi-agency task force, which on  
11 May 9th we had our first meeting. Later this month, May  
12 16th, we had our first kind of implementation workshop.  
13 And I'm glad to see that ARB was represented. Ashley did  
14 a presentation as well as Mr. Corey was there on the dais.  
15 It was a joint workshop, so we had the CPUC, as well as  
16 the Governor's office in attendance.

17           So just in updating on -- we really see this as a  
18 joint effort between the Energy Commission and ARB, and so  
19 we're happy that Ashley has worked very hard. Sam has  
20 been -- we've had joint community meetings. But in all of  
21 our workshops and roundtable discussions, we really worked  
22 together, so that we can leverage the investments that  
23 have already -- are already in place, and then complement  
24 that with the new policies and recommendations that we  
25 have.

1           So just to highlight some of the recommendations  
2 that we have identified as priority, based on either the  
3 maximum potential that it can have for low-income  
4 residents and disadvantaged communities, as well as sort  
5 of what's the low-hanging fruit, what can we practically  
6 accomplish and in the next two years.

7           So that includes looking at potential solutions  
8 for multi-family buildings and their clean energy issues,  
9 creating the regional service delivery, which is an  
10 overlap of kind of the same solution that Ashley meant,  
11 and these cross-cutting one-stop shop, so that there's one  
12 place that residents can come to find out about all clean  
13 energy programs transportation, efficiency, and otherwise.

14           We're also looking at better use of data,  
15 strategies for clean energy, labor, and workforce  
16 development. Again, another overlap that we want to work  
17 together. If we're going to train and build a workforce  
18 in energy efficiency, it might as well be in clean  
19 transportation as well.

20           (Laughter.)

21           MS. MATHEWS: So then lastly looking at clean  
22 energy pilots, financing pilots that we can implement in  
23 low-income communities. So the next steps for the Energy  
24 Commission will again first be to continue to work with  
25 ARB. We appreciate the strong partnership that we have.

1 We have our second implementation workshop on August 1st  
2 of this year. That's the tentative date. And we'll look  
3 at addressing some of the additional recommendations that  
4 we've had.

5           And then we also want to look at a tracking  
6 process, because we recognize one of the key components of  
7 the success of what comes out of SB 350 is the metrics  
8 that we identify and the tracking process, so we can make  
9 sure we are on target to our -- reach our State's climate  
10 change goals.

11           Thank you.

12           MS. WHITE: Good afternoon, Chair Nichols, Board  
13 members. Thank you for the kind invitation to speak  
14 today. And thank you to Ashley for all her fabulous  
15 outreach and connections with other agencies and the  
16 public.

17           I am very pleased with this study. And as the  
18 guidance notes from many of the stakeholders that were  
19 engaged, transportation costs can be a very significant  
20 burden especially for low-income households. And car  
21 ownership in particular, whether gas powered or electric,  
22 is the most expensive form of transportation. According  
23 to the AAA in 2016, the average car owner spent about  
24 \$8,000 a year owning and operating their car.

25           And for a low-income individual, \$8,000 can

1 easily represent 30 or 40 percent of a household budget,  
2 leaving little for other necessities like food, housing,  
3 education, and health care.

4           At the same time, we know that transportation is  
5 absolutely a necessity for life, liberty, and the pursuit  
6 of happiness. And as public servants, we absolutely want  
7 to increase access to economic and social opportunities  
8 for all, whether that's the kids going to the park, or mom  
9 getting to her new job, or dad picking the kids up after  
10 soccer practice.

11           And so how do we increase mobility options and  
12 access to the bounty of California for low-income  
13 residents without overburdening households, especially  
14 low-income households with excessive car ownership costs.  
15 And at the same time, how do we, as the draft AB 32  
16 scoping plan preferred scenario requires, actually start  
17 to decrease per capita vehicle miles traveled.

18           So I'd like to suggest that a focus for  
19 overcoming barriers to clean transportation should be on  
20 two things that are very much highlighted in this report.  
21 Thank you.

22           One is, I call it, the original zero-emission  
23 vehicle, which is our feet and bicycles; and two, the  
24 original high-occupancy shared vehicle, namely trains and  
25 buses. And at the State Transportation Agency, we



1 appreciate the opportunity to partner with ARB and many  
2 other sister agencies to expand safe, convenient,  
3 reliable, and yes, zero-emission transit, walking and  
4 biking.

5           And fortunately with the help of both the  
6 California climate investments, of which 50 percent have  
7 been committed so to date to disadvantaged communities,  
8 and now the passage of SB 1, as Ashley mentioned, the  
9 transportation funding package, we have significant  
10 resources -- I think we're making some progress towards  
11 your number one recommendation -- significant resources to  
12 both invest in these clean modes, as well as the housing  
13 that will allow low-income residents to afford to live or  
14 stay close to growing job centers and transit hubs.

15           In addition to new funding, there are a series of  
16 supportive policies and plans across the State that aim to  
17 increase access to transit walking and biking for everyday  
18 transportation. These strategies are outlined in many  
19 documents, such as the scoping plan, the California  
20 Transportation Plan 2040, and just released this week,  
21 very pleased to see, Caltrans first ever pedestrian and  
22 bicycle plan called Toward an Active California.

23           Finally, much of the innovation that I'm seeing  
24 around clean transportation is happening at the local  
25 level. And those local partners are key. Many city --

1 California cities are adopting vision zero plans, which  
2 aim to eliminate traffic fatalities, increase safety, and  
3 other cities are partnering with companies like Lyft to  
4 support reduced prime connections to transit.

5 Thank you again for the opportunity to provide  
6 some remarks, and I look forward to the feedback from the  
7 public on this study.

8 Thank you.

9 CHAIR NICHOLS: Thank you.

10 Any additional remarks or should we --

11 EXECUTIVE OFFICER COREY: I'm sensing from the  
12 long pause --

13 (Laughter.)

14 -- EXECUTIVE OFFICER COREY: -- that answers that  
15 they have concluded their presentation.

16 CHAIR NICHOLS: Turn back to discussion here.

17 (Laughter.)

18 CHAIR NICHOLS: I was waiting for fanfare or a  
19 musical interlude or something.

20 (Laughter.)

21 CHAIR NICHOLS: Okay. Well, that was fine. That  
22 was good, but I do think it calls for maybe a little bit  
23 of commentary here. One question I guess -- yes, of  
24 course. No, no, we will.

25 Sorry. We have a number of members of the public

1 who have signed up to speak to us on this comment -- on  
2 this -- on this item, and we will hear from them. I was  
3 thinking that perhaps it might be helpful to focus a  
4 little bit further in on the environmental justice piece  
5 though, and I did want to ask if Veronica was able to  
6 provide any additional comment on what you're up to with  
7 the multi-agency task force.

8 ASSISTANT EXECUTIVE OFFICER EADY: Well, as you  
9 know, we've had one -- one meeting, but I'll speak more  
10 generally about the intersection of environmental justice  
11 and clean transportation. As you've heard and can  
12 imagine, there's been overwhelming support for this and  
13 for the work of the team here in, you know, filling a gap,  
14 where there's a real need, and we heard today particularly  
15 in the San Joaquin Valley, I've heard a lot from the city  
16 of L.A. and other communities that are interested in  
17 bringing clean transportation to their disadvantaged  
18 communities.

19 There's been a lot of really wonderful activity  
20 going on thus far. And I find a really great synergy  
21 between the work here under SB 350, and you heard SB 1.  
22 So it's a really important time and alignment of the  
23 planets here for ARB to be able to leverage all of this  
24 great work that's going on within the agency and also with  
25 our partner agencies.

1           So anyway, I'll leave it at that. I think it's a  
2 really important report, and I think that from this point  
3 on, and the next time you hear from us on this, there will  
4 be a lot of major achievements.

5           CHAIR NICHOLS: Great. Thank you. I appreciate  
6 that.

7           Okay.

8           BOARD MEMBER GIOIA: Madam Chair, question?

9           CHAIR NICHOLS: We do have a list of witnesses.

10          Oh, sorry. Mr. Gioia.

11          BOARD MEMBER GIOIA: Yeah, just a comment. And  
12 thank you for I think this very thorough guidance  
13 document. One of the comments I have, and a question of  
14 how to approach this in a stronger way. There's  
15 discussion here, which I think is very good that -- and  
16 where it talks about securing permanent long-term funding  
17 sources, and it says this is a critical part of the next  
18 steps for the SB 350 process.

19          So having been involved developing and SCS in the  
20 Bay Area a few years ago, and watching the development of  
21 these plans around the State, I'm not so optimistic that  
22 local regions are all going to put the effort into doing a  
23 thorough analysis to look at potential funding sources to  
24 overcome these barriers.

25          So I'd like to see how we can strengthen our

1 recommendation to require -- I know we get to review the  
2 SCS plans to require that each SCS plan that's submitted  
3 specifically address this issue and develop a plan,  
4 because it's one thing to say, well, the SB 350 process  
5 should address this, it's another thing to try to place a  
6 requirement on local city and county officials. And  
7 there's a few of us up here. We know that different  
8 regions are going to approach this differently.

9           And I think we need to do something to ensure  
10 that there's the political will to actually be thorough  
11 and do that. So the question is how far can we go to  
12 require this analysis and identification of funding  
13 opportunities and specific strategies?

14           Because it should occur in each region that  
15 develops an SCS. That makes total sense, because they  
16 understand sort of their unique issues better than maybe a  
17 statewide approach. So I just want to beef up that  
18 recommendation to require it.

19           Do you have any suggestions on how to do that?

20           DEPUTY EXECUTIVE OFFICER KAPEROS: Supervisor  
21 Gioia, let me -- let me try to answer your question.  
22 You're right within the context within the existing  
23 framework for 375, the Board's role, and --

24           BOARD MEMBER GIOIA: Yeah, I'm referring to 375,  
25 right, right.

1           DEPUTY EXECUTIVE OFFICER KARPEROS: At our March  
2 Board meeting, Professor Sperling suggested that we hold a  
3 roundtable to talk about some of the funding issues. We  
4 have since then started to reach out to the MPOs and  
5 others about the format and agenda for that meeting.

6           We've also communicated with the MPOs about  
7 the -- where we think sort of initial -- ARB staff's  
8 perception on what initial targets could be for 375.

9           And those numbers are larger than what the MPOs  
10 have done with their bottom up. So we've begun a  
11 conversation with them that the ability to close that gap,  
12 and the ability for them actually to implement their  
13 existing SCSs is predicated on available funding.

14           So I think the -- one of the main agenda items  
15 for the roundtable, and we're targeting sort of an August  
16 time frame for that, will be this funding issue. How we  
17 sort of crack the nut of -- within the context we have  
18 with 375 to require it is -- certainly is a challenge, and  
19 I don't know -- I don't have a silver bullet for you in  
20 terms of answering that part today.

21           BOARD MEMBER GIOIA: I mean, you know, when we  
22 review the SCS, we're trying to ensure that they're  
23 meeting some statewide goals. Why can't we just make this  
24 one of the goals to include -- to ensure, because I get  
25 the value of a roundtable discussion. I've been to plenty

1 of roundtable discussions. They're great, but it doesn't  
2 get the regions of the State to act and require them to  
3 put these in their plan. So the information from the  
4 roundtable discussion is one thing, but it's connecting it  
5 to actually getting city and county officials to put this  
6 in the -- in their MPO plan.

7 I mean, I know the struggle it took to put a lot  
8 of issues in the Bay Area plan, and that's the Bay Area,  
9 and that came with a lot of advocacy.

10 I'm not so certain that's going to happen around  
11 the State. So if we have a checklist of what's required,  
12 can we go further and require it? I think we're sort of  
13 assuming folks are going to spend time on this issue, and  
14 I think we're wrong. They're not going to have the  
15 same -- different regions are going to not put the same  
16 amount of effort into this.

17 DEPUTY EXECUTIVE OFFICER KARPEROS: I don't think  
18 within the current structure of 375 that we can explicitly  
19 require certain strategies and funding mechanisms.

20 BOARD MEMBER GIOIA: I don't mean a strategy.  
21 Require identifying a plan to address this issue.

22 DEPUTY EXECUTIVE OFFICER KARPEROS: Okay. I  
23 follow. I apologize. I wasn't following.

24 I think we can integrate into our review of the  
25 SCSs a more rigorous evaluation of the language in SB 375

1 that if the -- if the plan were implemented --

2 BOARD MEMBER GIOIA: Right.

3 DEPUTY EXECUTIVE OFFICER KARPEROS: -- we can --  
4 I think we would have the opportunity to talk about what  
5 the risks are and the possibilities given the funding  
6 streams --

7 BOARD MEMBER GIOIA: Right.

8 DEPUTY EXECUTIVE OFFICER KARPEROS: -- to assure  
9 that the plan could be implemented.

10 BOARD MEMBER GIOIA: Right. And some of this is  
11 going to involve funding streams, some is going to involve  
12 just other strategies to remove barriers. And I think to  
13 me that is one of the most important places to develop the  
14 strategy is at these regional levels. And so we got a lot  
15 of bang for our buck, if we can require each of the  
16 regions to go through the effort to do this work. We're  
17 not concluding what the out -- what the specific strategy  
18 is going to be, we're just saying develop a strategy that  
19 works in your region that overcomes these barriers.

20 CHAIR NICHOLS: Well, even just consider it  
21 seriously --

22 BOARD MEMBER GIOIA: Right.

23 CHAIR NICHOLS: -- which doesn't have to happen  
24 right now. I mean, as I've been thinking about this, part  
25 of -- excuse me for piggybacking on this --



1 BOARD MEMBER GIOIA: Yeah, sure.

2 CHAIR NICHOLS: -- but, you know, part of what's  
3 been causing dissonance in my mind about this issue is  
4 that we have all these transportation planning efforts  
5 going on elsewhere, and lots of money being talked about,  
6 and a huge need to transform our system, which we keep  
7 talking about -- you know, more clean vehicles, more  
8 transit and so forth.

9 And in that realm, there isn't any discussion of  
10 the issues that we're dealing with over here in this  
11 removing barriers report.

12 BOARD MEMBER GIOIA: Right.

13 CHAIR NICHOLS: Now, we have to do the report,  
14 because we're legislatively mandated to do it, and also  
15 it's a useful exercise, but if there isn't a way that it  
16 blends back in to the other planning that's going on, it's  
17 going to be a continued disconnect, and, if not, tension  
18 outright, you know, warfare over how resources get spent.

19 And that's really, I guess, what I'm troubled  
20 about is that, you know, we have a state that has huge  
21 areas of poverty in it. We have a big disconnect between  
22 rich and poor as it is. We have a need to have people who  
23 can afford to buy their own car, buy clean cars, which are  
24 more expensive now than non-clean cars, and other -- face  
25 other barriers of their own in terms of being out there in

1 the community, and we've got this other whole issue that  
2 we're sort of treating as a completely separate problem.

3 And it is -- I mean, it has it's own issues for  
4 sure, but it doesn't seem like we're making connections  
5 that need to be made. I see Diane nodding, so I'm hoping  
6 she can help me articulate this.

7 BOARD MEMBER GIOIA: No, I appreciate you said  
8 that. I just want -- just a final comment I'll make.

9 CHAIR NICHOLS: Okay.

10 BOARD MEMBER GIOIA: For those of us who have  
11 been developing these plans at the local level --

12 CHAIR NICHOLS: Right.

13 BOARD MEMBER GIOIA: -- on the ground level, we  
14 understand how hard it is to include all of these things.  
15 And unless there's some requirement, it's not going to get  
16 done across the State period. I'm just saying.

17 And so I appreciate -- for those of you who don't  
18 serve in local government, it's easy to say, oh, we  
19 recommend this. But when push comes to shove at the local  
20 level, that's not going to -- some of this -- some of the  
21 regions it won't happen unless it's required. And I'll  
22 just say.

23 CHAIR NICHOLS: You've made your point.

24 BOARD MEMBER GIOIA: And finally, I appreciate  
25 there was the recommendation about identifying in sales

1 tax measures a separate allocation of funding for clean  
2 transportation access for lower income communities. And I  
3 think that was a really good recommendation. I realize we  
4 can't require that be put in measures, because I've heard  
5 the discussion in our own county when we've talked about  
6 these issues, the pollsters will say, we really can't put  
7 that kind of language in our measure, because we think it  
8 will affect the ability to pass.

9 I'm telling you, right, this unfortunately is the  
10 pushback that one gets, but I'm really glad that the  
11 recommendation is in there on putting separate allocation  
12 in sales tax measures.

13 CHAIR NICHOLS: That's very helpful. Thank you.  
14 Let's hear from our --

15 BOARD MEMBER TAKVORIAN: So can I jump in?

16 CHAIR NICHOLS: Sorry. Excuse me, yes, please.

17 BOARD MEMBER TAKVORIAN: Just on this one point,  
18 because there's lots to stay about the report. So this  
19 is not my comment on that. But just in terms of  
20 integration and requirement, I very much agree with  
21 Supervisor Gioia, and that we need to require and that --  
22 and with you, Chair Nichols, that we need to integrate.  
23 And that, I think, is starting to show up, in this report.  
24 And I very much appreciate it, because staff will attest  
25 that I've been saying that a lot.

1           So I'm sure not because of just that, but  
2 certainly a lot of folks have said that. And I think in  
3 addition to these specific recommendations -- there's  
4 -- there is in the SCS a requirement to define  
5 disadvantaged communities. And from my experience, that's  
6 very -- that is not consistent across the Board in the  
7 SCSs. So that nod from you means yes.

8           And our own experience in San Diego is that  
9 non-disadvantaged communities have been identified as  
10 disadvantaged. So I'd like to see us have that  
11 consistency across the board and use CalEnviroScreen to do  
12 it.

13           I don't want to start a whole thing, but I do  
14 think that that gets used in a variety of places, and that  
15 we need some consistency. And Chair Nichols you said from  
16 the beginning is that aren't we talking about poverty? We  
17 may not just be talking about poverty, but a lot we're  
18 talking about poverty. And so if you just look at that, I  
19 think then we start to have some consistency about where  
20 these strategies could begin to be applied. And I think  
21 the report supports that.

22           CHAIR NICHOLS: Thank you. Agree.

23           BOARD MEMBER MITCHELL: Ms. Chairman?

24           CHAIR NICHOLS: Yes.

25           BOARD MEMBER MITCHELL: A couple of thing.

1 CHAIR NICHOLS: Yes, Ms. Mitchell.

2 BOARD MEMBER MITCHELL: I want to just mention on  
3 this, because I'm one of those people that is on local  
4 agencies. And I think there is a need for integration,  
5 but I'm not sure the metropolitan planning organizations  
6 are the right place to do that, because a lot of what is  
7 suggested here requires funding. And at least SCAG  
8 doesn't have funding. Metro has the funding. ABAG, it  
9 may work differently in your region up in San Francisco,  
10 but SCAG is a huge organization, six counties.

11 And --

12 CHAIR NICHOLS: But aren't their plans supposed  
13 to direct where the funding goes?

14 BOARD MEMBER GIOIA: Yeah, they direct -- they  
15 direct the transportation funding.

16 CHAIR NICHOLS: Isn't that the point?

17 BOARD MEMBER MITCHELL: Well, that is true, they  
18 recommend where the funding goes.

19 BOARD MEMBER GIOIA: They direct transportation  
20 funding.

21 BOARD MEMBER MITCHELL: But also in -- South  
22 Coast is administering some programs for getting, you  
23 know, clean cars, secondary-market cars, out to the  
24 disadvantaged communities. So I'm not sure where that  
25 responsibility should lie, but it's something we have to

1 think about. And I'm just not sure what the answer is,  
2 but I'm telling you some of the issues.

3 BOARD MEMBER GIOIA: Can I add one more point. I  
4 think this is an important issue, if I can add one brief  
5 point?

6 CHAIR NICHOLS: Yes. Yes.

7 BOARD MEMBER GIOIA: So the SCS is the one chance  
8 that city council members and community supervisors who  
9 serve on these regional agencies get to come together and  
10 talk big picture about how to address, you know, planning  
11 to reduce GHGs. And so they come to it with the  
12 experience, right, of their local experience on their --  
13 in their city and in their county, so they know their  
14 region well. They collectively come together, right? And  
15 to the extent they're controlling the expenditure regional  
16 transportation dollars, I think it's a very powerful  
17 place.

18 And clearly, even if there's not enough money,  
19 they've at least identified a plan. So you identify the  
20 plan, right, for the obstacles, maybe identify some  
21 funding within the region that you can apply toward that  
22 and. It may not be all the funding, but we -- all the SCS  
23 -- all the MPOs have some control over transportation  
24 dollars.

25 So it's not going to be everything you need, but

1 at least it's a plan and some funding. It's a start.  
2 That's how I -- because if we -- otherwise we're punting.  
3 If we're not requiring it here, who's going to do it. We,  
4 us? I mean, we could --

5 CHAIR NICHOLS: Right, we're not.

6 BOARD MEMBER GIOIA: It's so much better to do at  
7 the regional level. Who else is going to do it? It's --  
8 These local elected officials get that working with their  
9 communities.

10 CHAIR NICHOLS: Well, I think that -- I agree  
11 with you. And I just want to add to that that people are  
12 afraid of taking on issue where they know money is  
13 required, and where they know they don't have the money.  
14 And I think that's actually backwards thinking. I think  
15 the only way you get the money is if you identify what you  
16 need in the first place, and then start working towards  
17 it, because otherwise you cannot create the pots of money  
18 that you're going to be able to spend.

19 And it certainly has worked out that way every  
20 time I've seen a bond measure happen, that all kinds of  
21 things are waiting to be brought forward, but it's always  
22 too late, because they want shovel-ready projects and  
23 people don't have even anything close to a shovel-ready  
24 project, because they never dreamed that there could be  
25 any money.

1           So we have to be able to plan and ask for things  
2 in advance of the money actually being there. Anyway,  
3 this is a useful discussion I think.

4           Let's turn to the -- let's turn to the people  
5 who've signed up to come speak to us beginning with jury  
6 Jared Sanchez.

7           MR. SANCHEZ: Hello. Jared Sanchez with the  
8 California Bicycle Coalition. And I have a script here.  
9 And before I read off my script, I just can't help being  
10 so enthused about the discussion and the comments being  
11 made up here. I think these points being made are things  
12 I hadn't heard being at the State level of the advocacy  
13 around transportation injustice that other agencies aren't  
14 simply just taking on.

15           So, Chair Nichols, when you said early on about  
16 injecting yourselves onto a table you haven't been onto  
17 before, I think is exactly what needs to be done and to  
18 strengthen that conversation around what we mean about  
19 transportation justice, and getting folks the proper means  
20 of travel that they need and deserve.

21           So going to my comments, I appreciate the staff  
22 for what you've done so far. I've kind of jumped in a  
23 little bit late on this, but definitely have a lot to say  
24 and chime in. The potential is great for low-income  
25 communities, and communities of color to reap the benefits



1 from a transportation system that has rarely prioritized  
2 them.

3           These are many of the same communities that have  
4 been historically deprived, discriminated, and  
5 disinvested. That the study was designed to address these  
6 long-standing barriers makes those working on  
7 transportation justice issues very optimistic. And I  
8 imagine grassroots organizations and actual low-income  
9 Californians who couldn't be here today, those that would  
10 directly benefit from these ideas are also optimistic  
11 about this document.

12           The true test, of course, is will a set of ideas  
13 in a document developed by the State reach its actual  
14 potential? We certainly understand that there are many  
15 factors that play and know that ARB is and should not be  
16 the only actor. However, in a lengthy letter submitted to  
17 ARB, CalBike and other transportation justice advocacy  
18 groups addressed some of the major factors that should be  
19 highlighted in the study, which ARB does have strong  
20 control over.

21           I will not go into those details now, other than  
22 to say that there can be a lot more done in analyzing the  
23 more systemic barriers, and why barriers exist. This type  
24 of analysis will better refine some of the barriers and  
25 recommendations put forth in the document.

1           One major aspect to consider the historically  
2 ingrain nature of inequitable public funding, the fact  
3 that the recently past multi-billion dollar transportation  
4 deal of SB 1 does not contain a single word around equity,  
5 fairness, or low-income residents is not an accident, and  
6 it's aligned with a very inequitable historical record.

7           It is a record of transportation investments in  
8 low-income communities, frequently harming vulnerable  
9 residents by subjecting them to unhealthy air, or fueling  
10 displacement pressures.

11           One of many points we recommend in our letter is  
12 for there to be a recommendation to improve existing State  
13 funding programs to target low-income Californians per SB  
14 535, AB 1550 and the Active Transportation Program, ARB  
15 should explore similar investment models to existing  
16 significant sources of transportation infrastructure  
17 funding.

18           Thank you for our time, and I hope the discussion  
19 continues and I'd love to be a part -- be a partner going  
20 on forward with this.

21           Thank you.

22           CHAIR NICHOLS: Thank you.

23           MS. ELENES: Good afternoon once again, Board  
24 members. My name is Grecia Elenes and I work for  
25 Leadership Council for Justice and Accountability. And as

1 I had mentioned earlier, our organization works very  
2 closely with some of the most disadvantaged, mostly rural,  
3 unincorporated communities across the Central and  
4 Coachella Valleys.

5           And these communities are living in the midst of  
6 California's enormous economy, and yet -- and yet they are  
7 not -- in no way benefiting from one of the world's  
8 largest economies. They -- these communities have very  
9 little -- limited access to just everyday basic needs, and  
10 nearly basically no access to just any type of clean  
11 transportation.

12           In the report, we are grateful to see that the  
13 ARB staff has acknowledged that these disadvantaged and  
14 rural communities do have very special needs and do have  
15 very unique needs. And however, we need to make sure that  
16 there's that source of funding to address these specific  
17 needs and make sure that that source of funding is  
18 targeting them.

19           I think one specific one I want to point out is  
20 the active transportation program that they identified  
21 within there, there is currently a rural/small urban  
22 set-aside in there. However, the problem with that  
23 set-aside is that in no way does it reach those really  
24 small rural communities with thousands and sometimes even  
25 hundreds of populations in them, it is very difficult for

1 them to apply, in any way, and be competitive at the  
2 statewide or even the small and urban competition level.

3           And -- sorry, I kind of lost my train of thought  
4 there.

5           And getting funding -- ensuring funding in  
6 programs like these are targeting these, the most  
7 disadvantaged, in these rural communities is very  
8 important, and it's very vital if you want to see any type  
9 of improvement in these communities in the coming -- in  
10 these coming years, because these communities, although  
11 they are the ones being burdened the most, they are always  
12 at the end -- at the short end of the stick receiving  
13 close to nothing.

14           And one specific complaint I real want to raise  
15 that I hear a lot from the community is just having  
16 basic -- clean school buses and clean transit buses is  
17 something that's very important to them, especially since  
18 their kids are the ones in those buses going day-in and  
19 day-out.

20           Concerns like these is something we really want  
21 to see further addressed, and also be able to hold MPOs,  
22 COGs, and other government entities accountable to ensure  
23 that clean energy and zero-emission transportation are  
24 being provided to these communities, and making sure that  
25 they're meeting performance standards that should be

1 completed amongst these entities that ensure low-income  
2 communities are involved in the process, and that their  
3 voices are being heard.

4 I think lastly one specific example I want to  
5 give that, we've been working with a community in Fresno  
6 county called Cantua Creek. It's a community of about 600  
7 people, more or less, and with -- with them, we were able  
8 to develop a project along with Green Community and Fresno  
9 ESE, EOC, where we developed -- it's called Van y Vienen.  
10 They were awarded this \$200,000 grant from the Just  
11 Transit Project, where basically they identified kind of  
12 an informal set up that they already have of where they  
13 call someone up and say, "Hey, can you give me a ride and  
14 I'll give you money too"? "Can you give me a ride so I  
15 can get to the City of Fresno to get to this appointment"?

16 And so they formalized it to where now they're  
17 going to have a fully electric van, and they're going to  
18 employ one or two people from that community to be able to  
19 get them back and forth. Julia Saus came up with that.  
20 So we really encourage that type of innovative thinking in  
21 these small rural communities.

22 Thank you

23 CHAIR NICHOLS: Thank you.

24 MR. PIMENTEL: Madam Chair and Board Members,  
25 Michael Pimentel with the California Transit Association.

1 I just want to thank you for the opportunity to  
2 address you today. And I'm here largely in support of the  
3 recommendations that are contained in this report.

4 However, before I turn the recommendations we agree with,  
5 I want to emphasize, because it's somewhat lost within the  
6 language of this report that public transit is already, by  
7 and large, a clean mode of transportation.

8 Our transit agencies operate in compliance with  
9 State regulations, the cleanest CNG and diesel buses in  
10 the country, and many are exploring the implementation of  
11 zero-emission buses as well as new optional low-NOx  
12 engines, which will reduce NOx emissions by 90 percent  
13 from today's baseline.

14 And, of course, many of my members, including the  
15 largest transit agencies in the State, like L.A. Metro,  
16 are operating electrified rail. This means that we take  
17 people out of cars and we put them into vehicles that  
18 reduce the amount of fuel used per passenger mile  
19 traveled, and we reduce congestion, which relieves engine  
20 idling.

21 So when we speak about removing barriers to clean  
22 transportation, we, as a State, should be emphasizing the  
23 importance of increasing the frequency, reliability, and  
24 convenience of public transit, not just implementing new  
25 cleaner vehicle technologies, so that we can provide new

1 mobility options for low-income individuals, and induce  
2 mode shift from choice riders.

3           Now, can transit become cleaner? Absolutely.  
4 And, of course, we've been in a long dialogue about how we  
5 do that. For the transit industry, the primary barriers,  
6 as you know, to cleaner vehicles are the following:

7           There are upfront capital costs for the transit  
8 buses, and charging infrastructure. And also, we face  
9 high and, at times, variable electricity rates. Now, the  
10 legislature and this body, through various incentive  
11 programs, are addressing the higher costs for cleaner  
12 vehicles. And the CPUC, alongside the State's major IOU's  
13 are aiming to address the costs associated with charging  
14 infrastructure with the transportation electrification  
15 applications. These are applications that we  
16 enthusiastically support.

17           So as the State moves to implement the  
18 recommendations of the study, which really boil down to  
19 supporting investments in and increasing awareness of  
20 cleaner transportation options, we encourage the State to:

21           One, increase funding for transit capital and  
22 operations. There's some discussion of SB 1, which, as  
23 you know, was signed by the Governor late last month. We  
24 consider that a really significant step forward. My  
25 association was at the forefront of making sure that

1 transit was a component of that package.

2 But in all, over ten years, it's going to provide  
3 something like \$9 billion. We've got a deferred -- we've  
4 got an anticipated need of about \$72 billion. So  
5 obviously it's a good first step, but we need to do more.

6 Next, we'd like to see an increase in ZEV --  
7 incentive dollars for zero and near-zero emission  
8 technologies. We think this can be done through existing  
9 funding mechanisms, like the GGRF and the AQIP, but it  
10 should also include new funding that may come on-line like  
11 the VW settlement Appendix D dollars.

12 And then lastly, we think that the State needs to  
13 adopt the transportation electrification applications  
14 before the CPUC, and increase dialogue between regulators  
15 and transit agencies about how we really move into an  
16 electrified space.

17 So thank you very much.

18 CHAIR NICHOLS: Thank you.

19 MR. FARIAS: Good afternoon, Chairman Nichols and  
20 members of the Board, my name is Linus Farias. I'm with  
21 Pacific, Gas and Electric Company. And we'd like to  
22 congratulate staff on the comprehensive study that  
23 identifies many of the clean transportation barriers for  
24 lower income residents.

25 PG&E agrees with the finding in the document that



1 there is no silver bullet or singular solution that can  
2 address clean transportation access since each community  
3 has unique needs.

4 Our efforts to build an electric vehicle charging  
5 infrastructure and offer EV rebates will provide few  
6 bullets or rather some solutions to help remove the  
7 barriers to fund clean transportation.

8 In late 2016, we started a three-year effort to  
9 install 7,500 Level 2 EV charging stations at apartments,  
10 condominium complexes, and workplaces that will include  
11 disadvantaged communities.

12 In January 2017, this year, we submitted a  
13 five-year \$253 million proposal to the California Public  
14 Utilities Commission that includes building make-ready EV  
15 infrastructure to support electrification of medium- and  
16 heavy-duty vehicle fleets, and public DC fast charging  
17 infrastructure for light-duty vehicles.

18 Alongside with this, similar proposals have been  
19 made by other investor-owned utilities. And the  
20 infrastructure includes incentives for disadvantaged  
21 communities. This year, we also started issuing rebates  
22 to residential EV and natural gas vehicle customers using  
23 funds generated from market sales of Low Carbon Fuel  
24 Standard, or LCFS, credits.

25 So, in conclusion, you know, we believe that

1 these actions will help remove some of the infrastructure  
2 barriers to clean transportation access and further the  
3 State's greenhouse gas emissions reduction goals.

4 I also want to note that we're also working  
5 internally with some of the authors of the EV bills to  
6 perhaps shift some of the funds to apply at  
7 time-of-purchase type incentives to further assist  
8 low-income customers and incentivize EV and other type of  
9 ZEV adoptions.

10 Thank you.

11 CHAIR NICHOLS: Could I just -- I'm not quite  
12 sure I understood that last point. You think that we  
13 should use the purchase incentives -- add charging station  
14 incentives to the purchase incentives? I just didn't  
15 understand you meant?

16 MR. FARIAS: No, I believe that in current  
17 legislative bills that are in process, there are  
18 opportunities to provide incentive dollars that could be  
19 done -- could be supplied at time of purchase.

20 CHAIR NICHOLS: Okay. Okay. Thank you.

21 MR. PARTIDA-LOPEZ: Madam Chair, Board members,  
22 Good afternoon. My name is Roman Partida-Lopez with the  
23 Center for Sustainable Energy. First off, I want to thank  
24 ARB staff for all their efforts in developing this draft.  
25 I know it was a long process. And they were out and about

1 in the community.

2           With that said though, I think it's really  
3 important that as we move forward in finalizing the draft  
4 that we not only go back to the community to report what  
5 guidance will be implemented -- or adopted, but actually  
6 start prioritizing those communities that -- to make sure  
7 that change does happen.

8           One thing it's actually just go and receive  
9 feedback, but what the community really wants is to  
10 actually see change. And so in order to see change, it's  
11 important to go back and start prioritizing and  
12 implementing programs in those regions, as well as, you  
13 know, there's been a lot of conversations of the different  
14 funding sources that are available or are becoming  
15 available. And it will be important to ensure that these  
16 priority recommendations made by the community are  
17 actually inserted into those investments to make sure that  
18 they are seeing a direct benefit from funding that is  
19 needed in their community.

20           I think many times what happens is, you know,  
21 there is a concept of, yeah, we want to do more in these  
22 communities, but at the end of the day it doesn't happen.  
23 And so we've got to figure out a way that we are doing  
24 that and prioritizing them in every investment that comes  
25 through the door.

1           And finally, there was a lot of conversations  
2 about the recommendations themselves and how do we apply  
3 them at the regional level, and I think that's also an  
4 important component to make sure that those conversations  
5 are happening, because there's only so much funding that  
6 will be available at the State level, but then there's  
7 others opportunities at the regional level that also need  
8 to be considered, and how do we start adding -- supplying  
9 more pressure to make sure that those communities at that  
10 regional level who may not be eligible for funding at the  
11 State level can access funding to make sure that we start  
12 that transition to a clean, more sustainable future.

13           Thank you.

14           CHAIR NICHOLS: Thank you.

15           MS. PARK: Still short.

16           (Laughter.)

17           MS. PARK: Thank you again for allowing me to  
18 speak. Again, I work for the Environmental Justice  
19 Program at Catholic Charities in the Diocese of Stockton.

20           I want to thank you for your efforts to  
21 understand the barriers of our low-income residents, and  
22 disadvantaged communities. Your work is important not  
23 just for those directly affected, but also for those  
24 indirectly affected to understand what their neighbors are  
25 dealing with.

1 I had heard a member of an organization say that  
2 bicycling and bike lanes are a rich person's problem,  
3 because they are recreational activities. But as you  
4 know, active transportation is everyone's concern, whether  
5 it's what you do or the air you breathe.

6 And it shocks me that people who say they are  
7 working for communities to little understand how these  
8 modes of transportation are what our homeless, low income,  
9 and disadvantaged communities use, aside from public  
10 transportation.

11 This way of thinking is really just another type  
12 of barrier. That is why I'm thankful for your efforts,  
13 and encourage you to keep moving strongly forward and to  
14 adopt language and policies that take these studies and  
15 solutions higher.

16 One last thing to add. I have seen how great  
17 numbers of vehicle drivers come up for the Tune in Tune up  
18 Program. We get people coming sometimes even from past  
19 Ripon. So again, I really appreciate your hard work, and  
20 for these programs, and I look forward to their  
21 strengthening and their inclusiveness.

22 And since I can't leave without saying a quote  
23 from Pope Francis in his Encyclical Laudato si. He says,  
24 "Advances have been made in the production of  
25 non-polluting energy and in the improvement of public

1 transportation. These achievements do not solve global  
2 problems, but they do show that men and women are still  
3 capable of intervening positively".

4 Thank you.

5 CHAIR NICHOLS: Thank you.

6 That concludes the list of witnesses that I have  
7 on this item. We've already had quite a bit of Board  
8 discussion on this item. I think we have a lot of  
9 expertise on this Board from our local officials, and also  
10 from people who have worked as advocates in this area over  
11 the years. And we probably all bring slightly different  
12 perspectives to it as well.

13 I'm tempted to say, Ashley, that you ought to do  
14 a focus group for Air Resources Board members. I'm only  
15 semi-joking on this issue. It might have to be something  
16 that you would do, you know, in smaller groups, or  
17 individually, but I do think that we have a lot of -- a  
18 lot of passion around these issues, and a lot of reason to  
19 be concerned.

20 And so this is not to take away anything from the  
21 work that's already been done. This was a very tough  
22 assignment, and I think you guys have done a terrific job  
23 with it. So I just want to find a way that we can help to  
24 make it even better and more useful going forward.

25 And Professor Sperling may have an idea.

1 (Laughter.)

2 CHAIR NICHOLS: No.

3 BOARD MEMBER SPERLING: I always have ideas.

4 CHAIR NICHOLS: Always have an idea.

5 BOARD MEMBER BALMES: Whether they any good it's  
6 not --

7 (Laughter.)

8 CHAIR NICHOLS: It's not that late in the day.

9 BOARD MEMBER SPERLING: You have to test out new  
10 ideas.

11 BOARD MEMBER GIOIA: It's an academic competition  
12 going on here.

13 CHAIR NICHOLS: Yeah, I guess so.

14 BOARD MEMBER SPERLING: You know, going back to  
15 what Supervisor Gioia said, I think there's a lot of merit  
16 in what he said. And one of the important points is a lot  
17 of this is local, and cities they've been starved for so  
18 long, and just like transit operators that have been  
19 starved for so long, that it's hard for them. They don't  
20 have the capabilities. They don't have the -- you know,  
21 the bandwidth to try out new things, and because I think  
22 in this case -- so I want to say it was a great report.  
23 And I've talked to Ashley Dunn about this a little bit, so  
24 she's not going to be surprised.

25 But I think the challenge here is to figure out

1 what really is important and which of these many, many  
2 ideas really make sense and -- both in terms of potential  
3 impact, as well as cost effectiveness. And these vary  
4 dramatically in terms of both of those criteria, when you  
5 look at the kinds of options that are being considered.

6           And, you know, to some extent, this might sound  
7 like a broken record, but transportation is changing. And  
8 so much of if you go out and do the focus groups, you  
9 know, the problem with that is you're going to be as --  
10 there's a saying about, you know, if you talk to Generals,  
11 they're going to fight the last war.

12           And this is a case where a lot of change is  
13 happening. And it's not just electric vehicles, but it's  
14 a whole new set mobility options that are out there. And  
15 some of the more innovative transit operators, the ones  
16 that have the greater capacity -- you know, and L.A. Metro  
17 is one of them, that really is doing -- trying -- is  
18 thinking -- I'll put it -- leave it there -- is thinking  
19 and getting ready to try some innovative things,  
20 initiatives.

21           So I do have some ideas, but I think the first  
22 point just is we need to really focus on where are the  
23 opportunities that really are going to have value and  
24 impact for low-income travelers?

25           And -- okay, frankly, to be a little politically



1 incorrect, giving them an electric car is not one of them.  
2 And, you know, 25 percent of the population buys new  
3 vehicles. Low-income people don't buy new vehicles. And  
4 so there's some thought about how to get, you know, used  
5 car -- you know, into the used car market. And that's a  
6 good idea, and eventually there will be some merit to it.

7           But that's not going to -- what we need to be  
8 doing, if we're concerned about social equity and  
9 environmental justice, we need to be improving the access  
10 and the mobility of low-income people. There is a real  
11 problem there.

12           And for one, now for the first time in a hundred  
13 years, we actually have some new ideas coming in. You  
14 know, all of the new -- okay, so I know people are going  
15 to be skeptical, but hear me out here -- all of these new  
16 App-based services -- you know, and I know that demand  
17 response. And a lot of people are going to respond, well,  
18 poor people don't have credit cards, and don't have  
19 smartphones, but there's lots of ways of getting around  
20 that.

21           And they are -- there's innovative projects  
22 around the country to, you know, you get debit cards to  
23 people. They can use other ways of accessing it -- these  
24 services.

25           So the reality is -- and again, to be a little

1 politically incorrect with my friend Michael from Transit  
2 Association, transit is really expensive. You know, if  
3 you look at the full cost, transit is the most expensive  
4 option we have to provide travel. Now, transit is really  
5 important, but it serves, you know, one to two percent of  
6 the travel, and it's really expensive. EVs are really  
7 expensive.

8           Now, we want to take advantage of transit,  
9 because transit does some things very well. And so the  
10 challenge is to figure out the first and last mile access,  
11 and how do you get people to, you know, buses, and BRT,  
12 and rail.

13           How do you fill the gaps, because most -- again,  
14 less than two percent of passenger travel is by transit.  
15 So that means most people are traveling by car. So the  
16 comment about don't focus on cars I think is actually  
17 mostly wrong, because that is how people travel. And we  
18 need to figure out how to use cars more efficiently. We  
19 can use pooling services.

20           So one thing we have to get over is this  
21 inhibition over dealing -- working with the Lyft Line and  
22 Uber Pool services. Politicians, local governments should  
23 be embracing these so wholeheartedly. It is by far the  
24 cheapest way of moving people around. We need to  
25 reformulate some of our public transportation finance.

1           And going back to some of the things Chairman  
2 Nichols was saying and some others is that let's figure  
3 out how to support these services that are much less  
4 expensive and much higher quality.

5           And so I guess my plea here is -- and it's not --  
6 that is not easy, and a lot of this has just happened.  
7 You know, all these kind of new ideas, and new  
8 technologies, and new ways of thinking are only two or  
9 three years old. So there's good reason why if you do a  
10 focus group or if you talk to local government people,  
11 they won't come up with a lot of these, you know, good  
12 solutions.

13           But these ideas are happening around the country.  
14 L.A. Metro, you know, to call them out a little bit in a  
15 good way, you know, they're trying out a microtransit  
16 service. They're about to put out an RFQ to provide  
17 microtransit, which basically is a small microbus that can  
18 run around and serve a lot of these areas that are not  
19 well served by big buses and rail, which serve a tiny part  
20 of the population.

21           So in terms of -- so I think going back to what,  
22 you know, Supervisor Gioia is saying is even more  
23 fundamental than that -- and he was right in everything he  
24 said, I thought. But even more fundamental is we've got  
25 to get some of these good ideas out there and figure out a

1 way to start really testing them and implementing them,  
2 and be willing to, you know, take risks and to make  
3 mistakes, because some of these services have been tried  
4 out and have failed around the country for -- usually  
5 because they do a poor marketing job, and that comes back  
6 to the problem is that cities and transit operators don't  
7 really have a lot of capability and capacity, and so --  
8 and cities, if you tell them to -- you know, here's a new  
9 project, go -- give them money and go do it, there's a  
10 really high probability it's going to fail.

11           So there has to be some kind of funding and  
12 support to help the cities, to help the transit operators,  
13 and a way of -- and that's why the finance -- the  
14 transportation finance is so key to this is we've got to  
15 restructure some of that money to be used in a way that  
16 really will get value and benefits, because we can -- we  
17 can get huge market shares, you know, with these kinds of  
18 services.

19           I mean, we can get 10, 20, 30 percent, you know,  
20 with pooling type services, low cost. The cost of cars  
21 now is about \$0.55 a mile. And, you know, I've been doing  
22 some research on this and calculating numbers. You can  
23 get -- with these pooling type vehicles, you can start  
24 getting that cost way down. And actually electric  
25 vehicles work really good in that because they have low

1 operating costs and low maintenance. And so when you  
2 start using these vehicles not for 10,000 miles a year,  
3 but for 30 or 40 or 50, the cost comes way down per  
4 passenger mile.

5           So my plea is let's not leap into this too  
6 quickly or too naively. And I guess for the report that  
7 means thinking through -- prioritizing a little bit about  
8 where are the real opportunities, and what does that mean  
9 for finance, what does that mean for assistance to the  
10 cities, what does that mean for reporting requirements and  
11 plans.

12           Okay. I talked way too long, but there's  
13 passion.

14           CHAIR NICHOLS: I think, that's a very useful  
15 contribution. I just am not sure how we send our staff  
16 off to do that prioritizing. It seems to me it's a task  
17 that requires input, people with different backgrounds,  
18 and types of expertise on how all this stuff works, and --  
19 as well as people being willing to put their values on the  
20 line. And it's not really a fair assignment to give to  
21 the staff to go do that.

22           BOARD MEMBER SPERLING: Right. The role of the  
23 staff is just to start us moving in the right direction,  
24 in terms of highlighting where are the opportunities and  
25 start thinking through what are the ways of supporting it.

1           You know, maybe we have an extension service  
2 program for cities, you know, to help them out. I think  
3 that's -- I mean, this really is -- you know, we're on the  
4 cusp of major changes here, and there are great  
5 opportunities. And it would be a disservice if we didn't  
6 at least start moving the discussion and talking to the  
7 Caltrans, and talking to the MPOs, the CTC about how to do  
8 things differently.

9           CHAIR NICHOLS: Well, we Definitely need to do  
10 this in conjunction with other agencies again -- John,  
11 yes.

12           BOARD MEMBER GIOIA: Just to add. I think we've  
13 had -- have a great start here. I mean, it's not like  
14 we're telling the MPOs to figure this out on their own.  
15 They have this document and all the recommendations and  
16 background in here, which I assume they're all going to  
17 pick up and utilize. And this will help them in crafting  
18 recommendations that work in their area.

19           So I think it would have been a lot harder to  
20 just, you know, hoist this on the MPOs if we hadn't done  
21 this work.

22           EXECUTIVE OFFICER COREY: Chair, I'm going to --

23           CHAIR NICHOLS: Yes. Go ahead, Dr. Sherriffs.

24           BOARD MEMBER SHERRIFFS: An observation that may  
25 be absolutely worthless --

1 (Laughter.)

2 BOARD MEMBER SHERRIFFS: -- but I'll make it  
3 anyway, because it's short.

4 BOARD MEMBER SPERLING: And you're a doctor.

5 BOARD MEMBER SHERRIFFS: And I'm a doctor, right.  
6 Trust me, I'm a doctor.

7 (Laughter.)

8 BOARD MEMBER SHERRIFFS: You know, thinking about  
9 these different ideas, well, they fall into two classes.  
10 And one is trying to change people's behaviors, and the  
11 other is whatever they do, fine, but we'll have clean  
12 technology for whatever they decide to do with it.

13 And I think it's worth, as we think about trying  
14 to do these things. Well, which class do those strategies  
15 fall into, because they are very different strategies.  
16 And partly it was stimulated by the comments from  
17 California Transit Association, because there's this huge  
18 resource out here. And on the face of it, that's  
19 absolutely right. This is the cleanest option. If you  
20 get everybody to do that, you know, it has a tremendous  
21 impact.

22 So how do you get everybody to do that? Well,  
23 that's a behavioral change by and large. Although, it  
24 also has to do with how that product is delivered,  
25 convenience and a number of other things, and repackaging

1 it and re-thinking it, because I think we all -- when we  
2 all think public transit, we think big buses and bus  
3 routes. And, yes, it's fantastic when transit authorities  
4 start thinking about themselves differently.

5 CHAIR NICHOLS: I am not satisfied with where  
6 this is ending up. I'm sorry. I know the staff is going  
7 to go back and they're going to continue to do more work,  
8 but I really want to see this Board, as a Board, figure  
9 out how to engage more effectively, and not just turn it  
10 over to Dr. Sperling to turn it into a workshop.

11 (Laughter.)

12 CHAIR NICHOLS: Although, maybe that's the  
13 answer. Maybe, he should do the workshop. It's an answer  
14 or a course.

15 VICE CHAIR BERG: No, I agree.

16 CHAIR NICHOLS: Yes, Diane.

17 BOARD MEMBER TAKVORIAN: Yeah. I am feeling  
18 frustrated as well. I feel great about the report. I  
19 think that the process -- I want to say, this is two big  
20 items in a row today, just to note, that I think have had  
21 great public involvement, environmental justice community  
22 involvement, and there's strong consensus about that fact.

23 So I think there's a culture shift that's  
24 happening. I just want point it out that -- and I really  
25 am grateful to you -- to all of you, and to the staff that



1 came before, and to our leadership for really putting that  
2 forward.

3           That said, I guess I just -- I feel like in a lot  
4 of ways, you're talking about the future, Dr. Sperling,  
5 but I also feel like we're living way in the past in many  
6 of our communities. We have streets the we can't walk on.  
7 We have the highest pedestrian fatalities. We need that  
8 basic infrastructure, so people can ride bikes and walk.  
9 We need bus passes so kids can get to school, and -- so  
10 there's -- like there's this basic framework that I hope  
11 that we can talk about and push forward.

12           And I'm -- that doesn't mean we shouldn't talk  
13 about more futuristic things, if that's even a way to  
14 describe it. But for many of our communities, this basic  
15 infrastructure doesn't exist. And I just hesitate to end  
16 this conversation with, you know, let's wait for the next  
17 big thing or embrace that big thing that -- that they got  
18 cheated out of having, you know, a subway system, or a bus  
19 system, or something that will actually get them to a job  
20 that improves their lives.

21           So I just -- I'm not sure how to proceed from  
22 here. Maybe, Chair, that it is a more robust workshop  
23 that we can have with a variety of people around the  
24 table.

25           CHAIR NICHOLS: And others -- yeah, and others.

1           BOARD MEMBER TAKVORIAN:  But I'm not confident  
2 that -- I don't want to say so go figure out yet another  
3 layer of futuristic activities, which is not all I thought  
4 you said, but I'm just -- I don't want it to get  
5 interpreted that way, but I also want there to be a  
6 requirement that we put it in the SCSs, and that I  
7 appreciate that it's now more integrated into the scoping  
8 plan, so --

9           CHAIR NICHOLS:  Well, I mean --

10          BOARD MEMBER TAKVORIAN:  -- I don't know what the  
11 answer is.

12          CHAIR NICHOLS:  -- I shouldn't criticize our  
13 sister agencies who are good enough to participate, and to  
14 come at the beginning, but I noticed that both walked out,  
15 both the CEC and the transportation Agency person left  
16 after they said their piece and they're no longer here.

17                 Well, they should be here as part of this  
18 continuing conversation, because they could possibly help  
19 us figure out what other proceedings are going on that we  
20 might be better able to plug into as well, because I  
21 think -- I exactly agree with the point.

22                 So, you know, instead what happens is that any  
23 new thing that comes along, like money that Volkswagen is  
24 investing in electric transportation, everybody wants to  
25 jump on it and use it for their community electrification

1 ideas, because there is no other source of money. And I  
2 get it that we don't want to let one more thing go by.  
3 And yet, at the same time, that may be not at all the most  
4 suitable for both legal and other reasons, you know, way  
5 to fund better access to clean transportation.

6 BOARD MEMBER GIOIA: Yeah, and actually I think  
7 this aligns perfectly with the funding that's available  
8 through the SCS, because, right, the goal of the SCS is  
9 how are -- you know, how do you, as the region grow in a  
10 way that reduces GHGs?

11 And the regional agencies, the transportation  
12 authorities have funding available. Again, as I said  
13 earlier, it's not all the funding we need, but so I think  
14 it's meaningful. I actually -- I think if it can be  
15 required at that level, there's some funding, there is a  
16 plan, that's the best we can do to at least hatch this and  
17 move it along.

18 And then on a parallel track have the roundtable  
19 discussion, and continue to develop good ideas and be  
20 helpful to the regions. And isn't that what we're doing?  
21 We're trying to be helpful to the regions on this.

22 I feel confident that if we get some funding and  
23 a plan in the regions, things will begin to happen in a  
24 more meaningful way.

25 VICE CHAIR BERG: And certainly talking about

1 that parallel track, if we were to look at -- and I  
2 couldn't agree with you more on the living in the past and  
3 how are we going to do some of the fundamental changes. I  
4 also see the intersection where we don't want to invest  
5 huge amounts of money that keep them in the past as we're  
6 really moving forward to this transportation revolution,  
7 so it's how to meet both. But I couldn't agree with you  
8 more.

9           It would be interesting taking the San Joaquin  
10 Valley model, where we were in an absolute situation of  
11 there's nothing that could be done, yet we got people  
12 together, and we absolutely agreed across all  
13 stakeholders, which was really impressive that we do could  
14 tackle these specific areas that would get us moving  
15 forward. I'd love to see that in the idea of sidewalks,  
16 and bicycles, and some modes of transportation that  
17 brought these communities more into what we take for  
18 granted quite frankly in other neighborhoods, and yet,  
19 have that other roundtable discussion looking at really  
20 what will beyond this report, because doesn't this report  
21 require some sort of activity and some sort of  
22 implementation within the next two years?

23           EXECUTIVE OFFICER COREY: It does and it has a  
24 periodic update. I think, it's on a three-year time  
25 frame.

1           So just to capture these points, because I'm  
2 trying to translate this into, okay, what do you -- what  
3 do you do with this?

4           (Laughter.)

5           EXECUTIVE OFFICER COREY: It's excellent  
6 conversation. It is. And it's recognizing that if this  
7 was easy, you wouldn't be having this conversation.  
8 There's some real challenges here, but I'm translating  
9 this into really two areas. What are the priorities?

10           And we already needed to do a follow-on  
11 workshops. Maybe in addition to that, it's a roundtable.  
12 I need to follow up with a number of Board members and  
13 have a conversation, CTC, others that I think will weigh  
14 in on that point.

15           But the other -- to me, this was the essence. It  
16 wasn't to me that the report doesn't have great ideas. It  
17 was a lot of them. And then it's how do you prioritize?  
18 And to me it was how do you operationalize and implement?

19           And I thought, Supervisor Gioia, one key point is  
20 the SCS. And the fact is that the way Kurt and we've  
21 looked at it traditionally it's probably been pretty  
22 narrow in terms of does the SCS meet the target. I think  
23 that is the right question. And I think it starts with us  
24 being pretty clear of what the expectations of SCS is.  
25 And I'm hearing clear expectations on the part of this

1 Board.

2           And I think it's where else can we connect the  
3 dots with respect to those priorities. SCSs is one. VW  
4 is another one. The scoping plan is another -- where are  
5 those connections made to operationalize action, change?  
6 So, to me, with respect to the revisions to the report,  
7 and the process that we've -- that how we go forward from  
8 here is the follow-on workshop.

9           We'll look at, you know is there some other form  
10 that would also lend itself to an exchange, but really  
11 focused on, to me, these two questions, a subset of  
12 priorities, and the mechanics of implementation. And the  
13 implementation question is you've got to connect the dots.  
14 And I thought Supervisor Gioia is right on point in terms  
15 of one area to connect the dots is with the SCS. That's  
16 how we take this conversation and try and translate it  
17 into next steps.

18           BOARD MEMBER SPERLING: Can I say one more thing?

19           CHAIR NICHOLS: Excuse me, yes, please.

20           BOARD MEMBER SPERLING: I think, you know, one of  
21 it is going back to our sister agency, you know, the  
22 transportation agency. You know, we mentioned SB 1 has a  
23 huge amount of new money. It seems one within of the most  
24 -- so all of the things that, you know, Richard Corey just  
25 said make a lot of sense, I think. But the money is

1 always the most important, right?

2 CHAIR NICHOLS: Um-hmm. That's what motivates  
3 people anyway.

4 BOARD MEMBER SPERLING: Right. And so if we can  
5 get the funding that is going to the transit agencies, and  
6 have some kind of conditions associated with it, that they  
7 get more money, if they, you know, participate in creating  
8 this broader set of services that are going to serve a lot  
9 more people, and if there's some of the, you know, other  
10 funding -- you know, looking at it more carefully, I think  
11 that -- that seems like the most effective way of actually  
12 changing things, because, you know, we can change policies  
13 and do plans, but money really, really changes them.

14 So I'm just saying how do we participate or  
15 influence that SB 1 money?

16 CHAIR NICHOLS: That's a really good question,  
17 and it would be a good thing to know the answer to. I  
18 have a sense that it's not easy to. It's going to go  
19 through the same old processes that it always does, and  
20 we're going to have the same results when we show up with  
21 CTC, which is they, you know, barely manage to listen much  
22 less do anything when we advocated in front of them.

23 So the fact is that we -- there's a lot more to  
24 be done in terms of building the relationships, but it  
25 does include also building our leverage in this situation,

1 which we need to keep our eye on. That's just -- that is  
2 a -- that is a fact.

3 I just -- I can't resist sharing this story.  
4 Hector and I were messaging back and forth about this over  
5 the last day or two. There was story in the LA Times,  
6 which every once in awhile does a, you know, big  
7 investigative report on something relating to our transit  
8 system.

9 And they did a big article about how ridership on  
10 the buses in L.A. has fallen by 18 percent during the same  
11 time period that the rail system was being built, and that  
12 we've been raising huge amounts of money for transit in  
13 Los Angeles. And they did a study -- the paper did a  
14 study that showed that most of the loss from the buses was  
15 to Uber-type services. That people were giving up their  
16 transit pass and taking Uber type services. People who  
17 are not rich enough to buy a car or necessarily even need  
18 a car, but who also have decided that they need and could  
19 afford a little bit better service than what they get from  
20 the buses.

21 But buried in the bottom of this story is a  
22 comment from the system, and maybe it was taken out of  
23 context, or they're going to say it was unfair, but it  
24 indicated that -- people are saying they don't want to  
25 take the bus, because it doesn't come often enough to



1 where they can pick it up, and it doesn't take them where  
2 they want to go. It drops them too far from where they  
3 want to go.

4           And the spokesman for the system said, well, it's  
5 true we haven't actually looked at the routes in about 20  
6 years because we just, you know, have't gotten around to  
7 updating our bus routes. And, you know, this is not a  
8 system that's full of slouches. I mean, these are smart  
9 people, but they don't -- they don't think of themselves  
10 as a planning agency or even necessarily as a service  
11 providing agency. They operate buses, and they build  
12 stuff.

13           And they're not thinking in terms of how to solve  
14 the transportation problem for poor people or for much of  
15 anybody else. But to the extent that poor people are  
16 involved, if they get a little bit more money, or can  
17 stretch their budget, they're just not going to -- they're  
18 not gong to use the system at all.

19           And this is a tragedy in every sense of the word.  
20 So I feel that we have an opportunity here, at least to  
21 some extent, to help make it better with this report, and  
22 other things we can do.

23           So I think we've sort given enough indications  
24 about where we would like to go with this, and we've been  
25 heard by our Executive Officer, and by the team that

1 worked on the report. So hopefully, we'll hear more.

2 Thank you very much. It's good work. Good work.

3 (Applause.)

4 CHAIR NICHOLS: Okay. We have one more item for  
5 today, and it's also of a reporting nature, but it's a  
6 different kind of a report. It deals with our  
7 international program. And I know people hear -- hear a  
8 lot. And in many instances, you also interact with  
9 foreign visitors or, in some cases, have even traveled on  
10 behalf of State talking about our programs. And so we  
11 thought it might be a good idea to hear from our own folks  
12 about what we're actually doing in trying to coordinate  
13 the increasing demands for our time and our expertise at  
14 the staff, and the political level in the area of  
15 international air and climate work.

16 Governor Brown has made climate action, as  
17 everybody knows, a central theme of his add  
18 administration. He's built on the record of the past  
19 administration, signing a memorandum of understanding with  
20 China, Mexico, and other national and sub-national  
21 governments.

22 And now since the Paris agreement came into  
23 force, and since we've seen questions being raised about  
24 the commitment of our federal government, it seems like a  
25 good time to give some additional thought to how

1 California fits within the program of attempting to  
2 forestall the worst effects of climate change. So I'll  
3 turn this over again to staff to give us a report.

4 EXECUTIVE OFFICER COREY: All right. Thanks,  
5 Chair Nichols. And as you mentioned, ARB has a long  
6 history of working with foreign jurisdictions to exchange  
7 information, provide technical assistance and learn their  
8 programs. For many years, we've welcomed foreign  
9 delegations who visited CARB to discuss our groundbreaking  
10 air quality science and research, to learn about our  
11 vehicle emissions laboratory testing procedures, and to  
12 discuss our climate change policies.

13 We've had frequent interactions with our partners  
14 Quebec, Ontario, as well as British Columbia, Oregon, and  
15 Washington, national and State agencies in Mexico,  
16 national and provincial governments in China, researchers  
17 and governments officials from South Korea, and Japan, and  
18 many others

19 So now, I'll ask Margaret Minnick, ARB's  
20 international liaison to give the staff presentation.

21 Margaret.

22 (Thereupon an overhead presentation was  
23 presented as follows.)

24 INTERNATIONAL LIAISON MINNICK: Thank you, Mr.  
25 Corey. Good afternoon Chair Nichols and members of the

1 Board. As Mr. Corey noted, CARB has a long history of  
2 providing technical consultation and support to other  
3 jurisdictions that are developing air quality programs.

4 --o0o--

5 INTERNATIONAL LIAISON MINNICK: California has  
6 been working on air quality issues for over 70 years. And  
7 we've made remarkable progress. As you can see from the  
8 bottom photo, smog was much worse in Los Angeles 50 years  
9 ago. This were over 100 air pollution alerts annually.

10 Because California was the first in the nation to  
11 tackle air pollution, groundbreaking scientific analysis  
12 methods, monitoring practices, testing protocols, and  
13 regulations were developed here. Today, cars, trucks, and  
14 other mobile equipment are cleaner and more efficient than  
15 ever, and pollution from stationary sources has been  
16 reduced significantly.

17 The air quality in Los Angeles has improved  
18 greatly since the 1970s cutting down the number of alerts  
19 from 100 to less tan ten per year today. This achievement  
20 is known around the world, and CARB has long been sought  
21 out by other states and countries as a source of  
22 cutting-edge air pollution, research, and policies.

23 --o0o--

24 INTERNATIONAL LIAISON MINNICK: California also  
25 has long been a leader in energy efficiency and clean

1 energy. As a result of the suite of programs put in place  
2 to meet the goals of AB 32, California's per capita and  
3 per GDP emissions are declining. Total statewide  
4 emissions are also going down. All this, despite a ten  
5 percent increase in population since the year 2000 with a  
6 population now approaching 40 million people.

7 This declining trend, coupled with programs that  
8 will continue to provide additional greenhouse gas  
9 reductions going forward, demonstrate that California is  
10 on track to meet the 2020 target.

11 Leading the way means showing others our path to  
12 sustainable growth. Last year, California grew to be the  
13 world's 6th largest economy. Job growth in the State has  
14 outpaced the national rate, and we continue to see strong  
15 investments in clean technology that is spurring new job  
16 creation.

17 In 2009, the California clean energy industry  
18 generated \$27 billion and employed 123,000 people. By  
19 2020, we expect it to grow in value over five times with  
20 345,000 people employed. California shows that clean air  
21 and a vibrant economy go hand in hand. And as a result,  
22 other jurisdictions look to our efforts as models for  
23 their own.

24 --o0o--

25 INTERNATIONAL LIAISON MINNICK: One measure of

1 our success is reducing emissions, and protecting public  
2 health and the environment. Another measure of our  
3 success is establishing robust and implementable programs  
4 that serve as models for other jurisdictions. There has  
5 been considerable international engagement on many of  
6 CARB's programs, including air quality monitoring and  
7 planning, enforcement, zero-emission vehicles, carbon  
8 pricing, greenhouse gas emission reduction policies and  
9 strategies, and many other topics.

10 --o0o--

11 INTERNATIONAL LIAISON MINNICK: Every year, CARB  
12 hosts 50 to 60 groups of international visitors in  
13 Sacramento and El Monte. These visitors range from  
14 students and professionals participating in fellowship  
15 programs, to researchers, scientists and engineers seeking  
16 solutions to air pollution challenges, to senior  
17 provincial and national government officials.

18 I last presented an update on international  
19 activities in December of 2014, and this graphic shows the  
20 number of visitors to CARB from each country in the world  
21 since then. The total number of international visitors  
22 for that period is over 600. As you can see, CARB is  
23 world-renowned and attracts visitors from every continent.

24 --o0o--

25 INTERNATIONAL LIAISON MINNICK: The Brown



1 our work with China. CARB has been working with our  
2 counterparts in China since 2007 to address their serious  
3 air quality problems. In 2013, California signed MOUs to  
4 cooperate on air quality with China's Ministry of  
5 Environmental Protection, and the Beijing Environmental  
6 Protection Bureau, as well as an MOU with the Chinese  
7 National Development and Reform Commission, which oversees  
8 China's efforts to address climate change.

9 CARB, along with CalEPA and the local air  
10 districts, has been actively engaging with the Beijing  
11 Environmental Protection Bureau on air pollution  
12 mitigation with regular calls between experts and periodic  
13 visits take place.

14 And Beijing is taking steps to clean its air,  
15 including plans to end coal usage completely in all of  
16 Beijing and its adjoining districts by 2020. The city  
17 began closing coal-fired power plants in 2015, and in  
18 March of this year announced that the last coal-fired  
19 power plant in the city had been shut down.

20 They are also stepping up enforcement of existing  
21 pollution laws. Although there is still quite a bit of  
22 coal being used in China, these are steps in the right  
23 direction. CARB continues to build on this work by  
24 hosting many delegations from other Chinese municipal and  
25 provincial governments to show them how California has



1 improved air quality over the past 50 plus years.

2 Many Chinese cities have now released  
3 comprehensive air pollution control plans and regional  
4 plans are being developed inspired by the California  
5 model.

6 --o0o--

7 INTERNATIONAL LIAISON MINNICK: CARB has also  
8 been working with engineers from Beijing regarding vehicle  
9 emission standards and testing, as well as vapor recovery  
10 during refueling of vehicles.

11 This engagement has been -- has included multiple  
12 visits of Beijing personnel to CARB and vice versa.  
13 CARB's clean air and truck policies, including  
14 zero-emission vehicles are having a significant positive  
15 influence on China's policies. In late 2015, the results  
16 of the California engagement became apparent when Beijing  
17 proposed new vehicle emission standards, based in large  
18 part on California LEV III standards and test procedures.

19 The Chinese national government examined these  
20 developments and ultimately chose to adopt China VI, the  
21 next standard -- next set of standards for the nation,  
22 which are similar to Euro 6.

23 To help facilitate on accelerating the  
24 commercialization of plug-in and fuel cell electric cars,  
25 the China U.S. Zero-emission vehicle policy lab was

1 established in 2014. This collaboration represents a  
2 unique partnership between the UC Davis Institute of  
3 Transportation Studies, of which Board Member Dr. Sperling  
4 is founding director, and the China Automotive Technology  
5 and Research Center, both leaders in ZEV technology and  
6 policy.

7 The advisory board is chaired by CARB and the  
8 NRDC. Last year, China announced that it intends to  
9 implement ZEV requirements for auto manufacturers, similar  
10 to California's ZEV mandate, evidence of the expanding  
11 benefits of cooperation and information sharing. We will  
12 continue our relationship with both Beijing and national  
13 regulators going forward to help ensure that cleaner  
14 vehicles are on the road in China.

15 --o0o--

16 INTERNATIONAL LIAISON MINNICK: CARB's expertise  
17 has also helped Chinese officials to enforce regulations  
18 on ocean-going vessels. China's emission control areas  
19 are a subject to a regulation that is similar to  
20 California's ocean-going vessel fuels regulation, which  
21 requires ships to switch over to cleaner burning fuel  
22 inside of established boundaries. CARB is the leader in  
23 this field, and our enforcement program is recognized  
24 around the world.

25 In April 2016, at the invitation of the Natural

1 Resources Defense Council, Enforcement Division Air  
2 Pollution Specialist Alex Barber provided hands-on  
3 training to Chinese marine safety officers on how to  
4 inspect ships. Just a couple of weeks after Alex's visit,  
5 the Chinese inspectors found their first non-compliant  
6 vessel.

7           The inspectors used techniques taught by Alex to  
8 verify the ship's logs and found that the ship had not  
9 switched over to compliant fuel as indicated. This was  
10 big news in China, and it got extensive media coverage.

11           Since the initial noncompliant ship, there have  
12 been a number of additional violations discovered in China  
13 using the techniques that Alex taught.

14           And just last month, Alex delivered classroom  
15 training on this topic at a workshop in Mexico City, where  
16 the national government is working on phasing in  
17 ocean-going vessel regulations in line with those in the  
18 U.S. and Canada.

19                           --o0o--

20           INTERNATIONAL LIAISON MINNICK: Speaking of  
21 Mexico, I'll now cover some highlights of our engagement  
22 with our neighbor to the south. During a June 2014  
23 mission to Mexico City, the Governor signed an MOU with  
24 the Mexican Ministry of Environment and Natural Resources  
25 and the National Forestry Commission pledging cooperation



1 Board member De La Torre traveled to Monterrey, Mexico,  
2 the Capital of the State of Nuevo León at the invitation  
3 of the U.S. Consulate there to share CARB's story.

4           Recently, the Governor of the State rolled out a  
5 new air quality strategic plan, specifically inspired by  
6 the California model. The goal is to create an  
7 independent agency in Nuevo León that is charged with all  
8 manner of State air quality regulations in two years.

9                           --o0o--

10           INTERNATIONAL LIAISON MINNICK: Climate change is  
11 a global problem that requires global reductions in  
12 greenhouse gases. Although California emits less than one  
13 percent of total global greenhouse gas emissions, we are  
14 having an outside impact on the global effort to combat  
15 climate change because of our groundbreaking programs that  
16 are being studied and used as models by governments around  
17 the world that are developing their own climate change  
18 programs

19           California's climate statute, AB 232, calls for  
20 California to take a leadership role in addressing climate  
21 change, and to work with national and subnational  
22 governments. Agreement among national and subnational  
23 governments to collaborate on climate issues reflect  
24 cooperation and progress in an area where it has been very  
25 difficult to find global consensus on the national level.

1 They also serve as a complement to the 2015 Paris  
2 Agreement.

3 AB 32 and the suite of programs that have been  
4 put in place in California to tackle climate change have  
5 inspired action around in the world and serve as an  
6 example of programs that reduce emissions while growing  
7 the economy. That's why nearly half of the visitors to  
8 CARB in 2016 were interested in learning about  
9 California's climate change programs with 22 percent here  
10 specifically to learn about cap and trade. In addition to  
11 that, another 18 percent or so were focused on  
12 zero-emission vehicle programs.

13 --o0o--

14 INTERNATIONAL LIAISON MINNICK: CARB has been  
15 working closely with our counterparts in Mexico and China  
16 on climate change, specifically greenhouse gas emissions  
17 trading systems. CARB leads the California-Mexico MOU's  
18 working group on climate change, and staff meet regularly  
19 by phone with representatives from Mexico.

20 The focus of the climate change working group to  
21 date has been on monitoring, reporting, and verification  
22 of greenhouse gas emissions, with both sides seeing this  
23 as the necessary foundation for rigorous greenhouse gas  
24 emissions reductions, including emissions trading systems.

25 And late last year, we also began to exchange

1 best practices on forest management to ensure carbon  
2 sequestration.

3 --o0o--

4 INTERNATIONAL LIAISON MINNICK: CARB has also  
5 held many meetings with officials responsible for the  
6 development of both China's provincial pilot emission  
7 trading system and China's national emissions trading  
8 system, which is expected to launch this year.

9 We have shared information regarding the design  
10 and implementation of California's Cap-and-Trade Program  
11 in order to inform the development of these programs.

12 --o0o--

13 INTERNATIONAL LIAISON MINNICK: CARB also engages  
14 in multi-lateral forums that help to develop policy  
15 foundation and technical infrastructure for greenhouse gas  
16 regulation sin multiple jurisdictions. California worked  
17 with other governments to establish the International  
18 Carbon Action Partnership, or ICAP, in 2007, which  
19 provides a forum for sharing experiences and knowledge  
20 among jurisdictions that have already implemented or are  
21 actively pursuing market-based greenhouse gas programs.

22 CARB remains involved in ICAP providing technical  
23 information on a regular basis. California also  
24 participates in meetings of the Partnership for Market  
25 Readiness, or PMR, a multi-lateral World Bank Initiative

1 that brings together more than 30 developed and developing  
2 countries to share experiences and build capacity for  
3 climate change mitigation efforts, particularly those  
4 implemented using market instruments.

5           And recognizing the need to address the  
6 substantial greenhouse gas emissions caused by  
7 deforestation of tropical forests, California worked with  
8 a group of subnational governments to form the Governor's  
9 Climate and Forest Task Force, or GCF, in 2008. The  
10 35-member jurisdictions are contemplating or enacting  
11 programs to reduce emissions from deforestation and land  
12 use.

13           GCF members engage in discussions to share  
14 information and experiences about the design of such  
15 programs, and how programs could potentially interact with  
16 carbon markets, including California's Cap-and-Trade  
17 Program.

18                           --o0o--

19           INTERNATIONAL LIAISON MINNICK: The Cap-and-Trade  
20 program is designed to enable linkage with similar  
21 programs in other jurisdictions, and is currently linked  
22 with the Canadian province of Quebec. Ontario has  
23 developed Cap -- a Cap-and-Trade Program that launched  
24 earlier this year, and is proposing to link their program  
25 with California and Quebec. And there is ongoing



1 collaboration on reporting, market rules, offset  
2 protocols, and other areas to support potential linkage.

3           We have seen design features of the State's  
4 Cap-and-Trade Program incorporated into other emerging and  
5 existing programs, such as European Union emissions  
6 trading system, and China's emerging national trading  
7 program.

8           In addition those I've specifically mentioned,  
9 there have been numerous other cap-and-trade information  
10 sharing engagements with countries from Kazakhstan to New  
11 Zealand.

12                           --o0o--

13           INTERNATIONAL LIAISON MINNICK: CARB is also  
14 working actively with Quebec on policies to increase ZEV  
15 numbers, pursuant to a 2014 letter of intent. And CARB  
16 actively participates in the International ZEV Alliance, a  
17 group spearheaded by California and launched in  
18 conjunction with the 2015 Paris climate talks.

19           Members of the ZEV Alliance are national and  
20 subnational governments committed to making all passenger  
21 vehicle sales in their jurisdictions ZEVs as fast as  
22 possible, and no later than 2015. The ZEV Alliance  
23 members meet regularly to discuss common challenges and  
24 solutions for meeting this ambitious goal.

25                           --o0o--

1           INTERNATIONAL LIAISON MINNICK: The Pacific Coast  
2 Collaborative is a cooperative agreement among the leaders  
3 of British Columbia, California, Oregon, and Washington to  
4 leverage clean energy, innovation, and low-carbon  
5 development to reduce the effects of climate change on the  
6 regional economy. Members have agreed to harmonize 2050  
7 targets for greenhouse gas reductions and to develop  
8 mid-term targets to support long-term reduction goals.

9           CARB is an active member of the PCC work group on  
10 low carbon fuels issues to share insights gained from  
11 developing and implementing California's Low Carbon Fuel  
12 Standard.

13           Staff and executive office members have met and  
14 participated in multiple conference calls with their  
15 counterparts to discuss design elements and Challenges of  
16 the LCFS.

17                           --o0o--

18           INTERNATIONAL LIAISON MINNICK: The Low Carbon  
19 Fuel Standard is seen as an effective tool to reduce  
20 dependence on fossil fuels and to incentivize innovation  
21 in clean fuels. CARB staff engage regularly in  
22 discussions with their counterparts to share our  
23 experiences on the design and implementation of our LCFS  
24 program.

25           Low carb fuel mandates, similar to California's

1 LCFS, have been adopted by the UC EPA and by other  
2 jurisdictions, including Oregon, British Columbia,  
3 European Union and the United Kingdom. Germany also has  
4 an LCFS program, and Canada and Brazil are in the process  
5 of developing LCFS programs.

6 --o0o--

7 INTERNATIONAL LIAISON MINNICK: In the year  
8 preceding the Paris negotiations in December 2015, the  
9 Governor's office recruited subnational jurisdictions to  
10 sign onto the Under 2 MOU, which brings together states  
11 and regions willing to commit to reducing their greenhouse  
12 gas emissions by 80 to 95 percent or to limit emissions to  
13 two metric tons CO2 equivalent per capita by 2050.

14 The MOU garnered 127 signatories and provided  
15 support for action at Paris, reassuring national  
16 governments that the provinces and municipalities within  
17 their countries are ready to act to reduce greenhouse  
18 gases.

19 Today, a total of 170 jurisdictions, representing  
20 33 countries and six continents have signed on or endorsed  
21 the Under 2 MOU and joined the Under 2 Coalition, a global  
22 forum that supports the signatories in developing  
23 de-carbonization strategies and aligning on a trajectory  
24 consistent with 2050 carbon neutrality.

25 Together, under 2 regions represent more than 1.8

1 billion people, and more than \$27 trillion in GDP,  
2 equivalent to more than a third of the global economy.  
3 Many foreign jurisdictions seek out California's  
4 expertise, because of our history of success, in  
5 addressing air pollution and climate change, but  
6 California also benefits from these interactions.

7           As mentioned previously, expanding global action  
8 to fight air pollution and climate change expands markets  
9 for clean technology. And innovative policies and lessons  
10 learned in our partner's jurisdictions can help to inform  
11 future policies in California.

12                           --o0o--

13           INTERNATIONAL LIAISON MINNICK: Subnational  
14 climate leadership and California's continued commitment  
15 is even more important now in light of the policies of the  
16 new federal administration. Governor Brown highlighted  
17 this in his State of the State Speech earlier this year,  
18 committing to continue to work with other States,  
19 provinces, and countries to stop the dangerous rise in  
20 climate pollution.

21           In light of that urgency and to continue  
22 California's leadership role in Under 2 Coalition, and our  
23 long-standing climate, clean energy, and economic ties  
24 with China, Governor Brown will be leading a delegation to  
25 China next week that includes CARB Chair Nichols, and

1 Energy Commission Chair Weisenmiller.

2 --o0o--

3 INTERNATIONAL LIAISON MINNICK: During the  
4 week-long trip, Governor Brown and the delegation will  
5 participate in the Clean Energy Ministerial, an annual  
6 meeting of national energy ministers and other high level  
7 delegates from nearly two dozen countries and will also  
8 join with China's Ministry of Science and Technology and  
9 Sichuan Province to host the Under 2 Clean Energy Forum,  
10 which expands on the Clean Energy Ministerial by bringing  
11 together members of the Under 2 Coalition, as well as  
12 business and NGOs to discuss subnational and non-State  
13 action to de-carbonize the economy.

14 --o0o--

15 INTERNATIONAL LIAISON MINNICK: Looking forward,  
16 CARB's commitment to international collaboration is  
17 unchanged and more important than ever. We will continue  
18 to share our air quality knowledge, methods, and expertise  
19 with visitors from around the world, and to work with  
20 partners on developing and implementing comprehensive  
21 solutions for combating climate change.

22 And CARB's new laboratory and research facility  
23 in Southern California, which is slated to open in 2020,  
24 will enhance those engagements through design features  
25 that facilitate hosting of visitors.

1 Thank you. We'll now take any questions.

2 CHAIR NICHOLS: Thank you.

3 I think this is useful as a reference, if nothing  
4 else, when people either hear about or have questions  
5 about what we might be doing with some other country. It  
6 may be helpful to just have this around to refer to. It's  
7 a lot obviously, but it reflects a lot of work, and a lot  
8 of engagement.

9 And I think one of the things that comes up from  
10 time to time, especially in the political arena is, you  
11 know, why are we spending so much time with all these  
12 foreign countries? And I think it's important that we be  
13 able to explain the fact that this is something that we've  
14 made a serious commitment to. It's not just kind of an  
15 afterthought or a frivolous activity.

16 Comments, questions?

17 BOARD MEMBER BALMES: Well, it's mostly a  
18 question.

19 CHAIR NICHOLS: Okay.

20 BOARD MEMBER BALMES: In reading some of the  
21 articles about SB 775, it was suggested that that would  
22 abrogate -- if that was passed, that would abrogate the  
23 existing arrangements that we already have with Quebec and  
24 it would preclude other potential linkages --

25 CHAIR NICHOLS: Yes. We've expressed --

1 BOARD MEMBER BALMES: -- which I consider a  
2 problem.

3 CHAIR NICHOLS: -- concerns about the language of  
4 that statute to the author. It's not actually ever had a  
5 formal hearing as of yet. So it's unclear exactly how  
6 things are going to evolve, but there's no question that  
7 as it was originally presented, it would have an impact.  
8 It also would have precluded any use of offsets. It would  
9 have reduced the amount of offsets and precluded the use  
10 of any of them outside of California really, or acceptance  
11 of any from outside of California, I should say.

12 And again, that's one of those issues that  
13 reflects a view that, you know, we should pretty much do  
14 everything inside the borders of the State of California.  
15 And I think it's just important to realize that not only  
16 have we contributed a lot to the well-being of the rest of  
17 the country, and other parts of the planet, as result of  
18 our efforts, but we've gained from these engagements too.

19 We certainly have a lot of ideas and a lot of  
20 wisdom in our State, but we're not the repository of  
21 all -- all good ideas, and it's really quite helpful to be  
22 engaged, especially as we work with other countries that  
23 are seeing a lot of development activity going on. It's  
24 very much to the benefit of Californians.

25 BOARD MEMBER BALMES: I guess there's kind of an

1 analogy to what's going on at the national scene. I don't  
2 think we should be just California first.

3 CHAIR NICHOLS: Right. Hector.

4 BOARD MEMBER DE LA TORRE: Thank you. Two  
5 thoughts. One, thank you for including what we did with  
6 Nuevo León that, you know, I knew it was just an  
7 invitation out of the blue, and they wanted someone who  
8 spoke Spanish, so I went.

9 And they had me speak to all kinds of different  
10 groups, but they had expressed interest in doing some of  
11 these things, but they just had no idea, because a  
12 previous Governor had disbanded all of their efforts in  
13 the past, including their Smog Check program, and so  
14 didn't know where it was all going to lead.

15 There were a couple of conversations from July of  
16 last year until as recently as a few weeks ago. And then  
17 the Governor -- I didn't get any heads up or anything  
18 obviously, but the Governor announced he was going to  
19 roll-out this agency. They're very interested in the way  
20 we do things here. I did take the opportunity, while I  
21 was there, to make a funny play on a famous Mexican  
22 saying. Poor Nuevo León, so far from California, so close  
23 to Texas.

24 (Laughter.)

25 BOARD MEMBER DE LA TORRE: They got a kick out of



1 that.

2 CHAIR NICHOLS: I'm sure.

3 BOARD MEMBER DE LA TORRE: They're there.

4 They're doing it. They're going to roll-out a smog check  
5 program. They're very interested in our representation of  
6 the people of California, the structure of this board.  
7 They're obviously interested in the technical expertise  
8 that we've got, and so it was just a very positive  
9 outcome, I think. But it was -- they knew to look to us  
10 and it's that first slide that you showed, the growth with  
11 environmental improvement that really got their attention.  
12 That is our number one sales pitch around the world.

13 I think the Chinese were attracted by it, and so  
14 they were very, very impressed. But they couldn't believe  
15 it, when I -- I was on my presentation and so they asked a  
16 lot of questions about that. What does that mean, and is  
17 that true, and -- so that was very, very interesting, and  
18 very positive. And I imagine we're going to continue to  
19 be responsive. We -- they just reach out to us, and  
20 whatever questions they have, we answer.

21 The second thing is obviously there's a lot of  
22 interest in the capital about this, about what we're doing  
23 for all the reasons that the Chair mentioned. So I think  
24 we need to put this in a really nice package and share  
25 with 120 people over there, as soon as possible, because

1 they need to understand how big this is.

2 I get the California First thing. I'm very much  
3 there, but they have to understand in tangible ways how we  
4 are influencing what's going on around the world.

5 Thank you

6 CHAIR NICHOLS: Well, one of the things I am  
7 always surprised by is the disconnect that we sometimes  
8 experience between the issues we talk about here versus  
9 how people respond out in the communities in California.

10 And young people, regardless of where you are in  
11 the State, just take it for granted that we live in a  
12 world where you interact internationally, and that, you  
13 know, of course, we're Californians, and, you know, we  
14 live here, and we care about what's happening in our  
15 communities. But no matter what else, they have a whole  
16 different view of themselves as global citizens, I think,  
17 than people of my generation did.

18 And it's -- I think we would be missing a lot if  
19 we were just to ignore that tendency

20 So Dr. Sherriffs.

21 BOARD MEMBER SHERRIFFS: Yeah. And just, you  
22 know, San Joaquin Valley thinking -- you know, we all are  
23 concerned in San Joaquin Valley particularly about  
24 pollution drifting into our constituencies, and the  
25 effect, for instance, pollution that comes from China.

1           And as we're studying that to better understand  
2 how important that is, regardless of the answer to that  
3 question, at the end of the day, boy, I certainly endorse  
4 so much better that we have a good collaborative  
5 relationship with folks. And, in fact, we've been  
6 contributing to their efforts already to improve their  
7 situation which may indeed benefit us as well.

8           CHAIR NICHOLS: Anybody else?

9           No. If not, I think I see people getting ready  
10 to move.

11           (Laughter.)

12           CHAIR NICHOLS: It's the hat that does it.

13           (Laughter.)

14           CHAIR NICHOLS: Having your hat on is kind of a  
15 signal.

16           (Laughter.)

17           CHAIR NICHOLS: So without further ado, and  
18 without any objections, thank you for the update. We  
19 appreciate it, and we will be adjourned. Except I have to  
20 ask for public comment. I forgot. Did anyone sign up for  
21 broad public comment?

22           BOARD CLERK McREYNOLDS: (Shakes head.)

23           CHAIR NICHOLS: Good. All right. Then we will  
24 be adjourned.

25           Thank you.

(Thereupon the Air Resources Board meeting  
adjourned at 3:43 p.m)

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## C E R T I F I C A T E O F R E P O R T E R

I, JAMES F. PETERS, a Certified Shorthand Reporter of the State of California, do hereby certify:

That I am a disinterested person herein; that the foregoing California Air Resources Board meeting was reported in shorthand by me, James F. Peters, a Certified Shorthand Reporter of the State of California, and was thereafter transcribed, under my direction, by computer-assisted transcription;

I further certify that I am not of counsel or attorney for any of the parties to said meeting nor in any way interested in the outcome of said meeting.

IN WITNESS WHEREOF, I have hereunto set my hand this 9th day of June, 2017.



JAMES F. PETERS, CSR  
Certified Shorthand Reporter  
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