MEETING

STATE OF CALIFORNIA
AIR RESOURCES BOARD

CALEPA HEADQUARTERS

BYRON SHER AUDITORIUM

SECOND FLOOR

1001 I STREET

SACRAMENTO, CALIFORNIA

THURSDAY, JULY 23, 2015 9:06 A.M.

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

APPEARANCES

BOARD MEMBERS:

Ms. Mary Nichols, Chair

Ms. Sandra Berg, Vice Chair

Dr. John Balmes

Mr. Hector De La Torre

Supervisor John Gioia

Mr. John Eisenhut

Ms. Judy Mitchell

Mrs. Barbara Riordan

Supervisor Ron Roberts

Supervisor Phil Serna

Dr. Alexander Sherriffs

Professor Daniel Sperling

STAFF:

Mr. Richard Corey, Executive Officer

Dr. Alberto Ayala, Deputy Executive Officer

Ms. Edie Chang, Deputy Executive Officer

Mr. Kurt Karperos, Deputy Executive Officer

Ms. Ellen Peter, Chief Counsel

Ms. La Ronda Bowen, Ombudsman

Mr. Inder Atwal, Air Pollution Specialist, Strategic Planning Development Section, Mobile Source Control Division(MSCD)

APPEARANCES

STAFF:

- Ms. Christina Morkner Brown, Assistant Chief Counsel
- Mr. Michael Carter, Branch Chief, Mobile Source Regulatory Development Branch, MSCD
- Mr. Gregory Harris, Air Pollution Specialist, Transportation and Toxics Division(TTD)
- Mr. Douglas Ito, Assistant Division Chief, TTD
- Mr. Nesamani Kalandiyur, Manager, Transportation Analysis Section, AQPSD
- Mr. Robert Krieger, Manager Emissions Evaluation Section, TTD
- Mr. Stephen Lemieux, Manager, On-Road Heavy Duty Diesel Section, MSCD
- Ms. Karen Magliano, Chief, Air Quality Planning and Science Division(AQPSD)
- Ms. Cynthia Marvin, Chief, TTD
- Ms. Claudia Nagy, Attorney
- Ms. Terry Roberts, Manager, Sustainable Communities Policy and Planning Section, AQPSD
- Ms. Kim Heroy-Rogalski, Manager, Strategic Planning and Development Section, MSCD
- Mr. Jon Taylor, Assistant Division Chief, AQPSD
- Ms. Amy Volz, Air Pollution Specialist, Sustainable Communities Policy and Planning Section, AQPSD
- Mr. Alexander Wang, Senior Attorney
- Mr. Erik White, Division Chief, MSCD

APPEARANCES CONTINUED

ALSO PRESENT:

- Mr. Alan Abbs, California Air Pollution Control Officers Association
- Mr. Jason Barbose, Union of Concerned Scientists
- Ms. Jennifer Barrera, California Chamber of Commerce
- Mr. Will Barrett, American Lung Association
- Mr. Andrew Chesley, San Joaquin Council of Governments
- Mr. Larry Greene, Sacramento Metropolitan Air Quality Management District
- Ms. Ahron Hakimi, Kern Council of Governments
- Mr. Henry Hogo, South Coast Air Quality Management District
- Mr. Todd Kahl, Coastside Service
- Ms. Carey Knecht, Climate Plan
- Ms. David Lusk, Butte County Air Quality Management District
- Mr. Bill Magavern, Coalition for Clean Air
- Dr. Melanie Marty, California Office of Environmental Health Hazard Assessment
- Ms. Christine McCain, Environmental Defense Fund
- Ms. Jerilyn Lopez Mendoza, Souther California Gas
- Dr. Ben Sharpe, The International Council of Clean Transportation
- Mr. Mikhael Skvarla, California Council for Environmental and Economic Balance
- Ms. Dave VanMullem, Santa Barbara Air Pollution Control District

APPEARANCES CONTINUED
ALSO PRESENT:
Ms. Jill Whynot, South Coast Air Quality Management District
Ms. Ella Wise, Natural Resources Defense Council

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1 PROCEEDINGS CHAIR NICHOLS: Our sound system is working. 2 3 Yes, it is. Okay. We're ready to go then. Good morning, 4 everyone. The July 23rd 2015 public meeting of the Air Resources Board will come to order. And as is our custom, 5 we will say the Pledge of Allegiance before we start. 6 7 (Thereupon the Pledge of Allegiance was 8 recited in unison.) 9 CHAIR NICHOLS: Madam Clerk, would you please 10 call the roll? BOARD CLERK JENSEN: Dr. Balmes? 11 BOARD MEMBER BALMES: Here. 12 13 BOARD CLERK JENSEN: Ms. Berg? 14 BOARD MEMBER BERG: Here. 15 BOARD CLERK JENSEN: Mr. De La Torre? 16 Mr. Eisenhut? 17 BOARD MEMBER EISENHUT: 18 BOARD CLERK JENSEN: Supervisor Gioia? 19 BOARD MEMBER GIOIA: Here. 20 BOARD CLERK JENSEN: Ms. Mitchell? 21 BOARD MEMBER MITCHELL: Here. 22 BOARD CLERK JENSEN: Mrs. Riordan? 23 BOARD MEMBER RIORDAN: Here. 24 BOARD CLERK JENSEN: Supervisor Roberts?

Here.

BOARD MEMBER ROBERTS:

25

BOARD CLERK JENSEN: Supervisor Serna?

BOARD MEMBER SERNA: Here.

BOARD CLERK JENSEN: Dr. Sherriffs?

BOARD MEMBER SHERRIFFS: Here.

BOARD CLERK JENSEN: Professor Sperling?

BOARD MEMBER SPERLING: Here.

BOARD CLERK JENSEN: Chairman Nichols?

CHAIR NICHOLS: Here.

BOARD CLERK JENSEN: Madam Chairman, we have a quorum.

CHAIR NICHOLS: Great. A couple of announcements before we get started relating to the building itself and to our procedures. If there's anyone here who's not accustomed to appearing at the Board, we have a request to speak card that's available outside in the lobby. Anyone who wishes to speak on any item or during the public comment period is requested to put in a card before the meeting so we know how many people we should plan to make time for.

There will be a three-minute time limit for witnesses. I'm also required to tell you that there are exits from this room. In the event of an emergency, you should proceed out the exits in the back of the room or at the side here, if you're in the front, and go downstairs. In case a fire alarm rings during the course of the

meeting, we will have to evacuate it immediately and stay outside in the park across the street until we get the all-clear signal. I think that's it for the mandatory announcements.

We have several items this morning on our consent calendar. And with each of them all the information has been posted and the Board members are familiar with them. But if anyone chooses to ask that the item be taken off of the consent calendar, they may do so, and then we would proceed to a hearing on that item. So let me just run through those.

We have, first of all, the first item which is consideration of appointments of two new members to the Research Screening Committee. Is there anyone who wishes to those to not be on consent?

All right. Then I will just go ahead and call for a vote on that item.

All those in favor, please say aye?

(Unanimous aye vote.)

CHAIR NICHOLS: Any opposed?

Any abstentions?

Okay. Great.

The second one is a public meeting to consider research proposals and contract augmentations. This is coming from our Research Division. Is there anybody who

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   would like to see those taken off consent?
             No. All right. Then let's go ahead and have
 2
 3
    a -- call for vote on those.
 4
             All in favor please say aye?
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             (Unanimous aye vote.)
             (Ms. Berg and Professor Sperling abstaining.)
 6
7
             CHAIR NICHOLS: Any opposed?
8
             Okay. Any abstentions.
9
             BOARD MEMBER BERG: Yes.
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             CHAIR NICHOLS: One abstention. Ms. Berg. Okay.
11
    Thank you.
             BOARD MEMBER SPERLING: Here, too.
12
13
             CHAIR NICHOLS: And also Dr. Sperling. Didn't
14
   get your hand up fast enough.
15
             (Laughter.)
16
             CHAIR NICHOLS: Okay. Item 3, which is the
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   public meeting to consider the transportation conformity
    budgets for the San Joaquin Valley fine particle State
18
19
    implementation plan supplement. Any concern about having
20
    those go forward on consent?
21
             All right. Then seeing none, I'll just call for
    the vote on that one?
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23
             All in favor please say aye?
2.4
             (Unanimous aye vote.)
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             CHAIR NICHOLS: Any opposed?
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Any abstentions?

All right. Another consent item, which is a meeting to consider submission of waiver and authorization measures. Any issues with those?

All right. Seeing none. I think it is important to vote on them separately just to make sure that there's not any question about any of this.

So all in favor please say aye?

(Unanimous aye vote.)

CHAIR NICHOLS: Opposed?

Abstain?

Public meeting to select and appoint a Vice Chair is our next item, which is not a consent item, is that right?

This is a major issue.

(Laughter.)

about this one actually. So first of all, as you know, there is no statutory provision for a Vice Chair of the Air Resources Board. So lest anybody think that we are, you know, exceeding our authority here, I wanted to make sure that you know that we have researched this, and that it is proper and legal for us to create such a position, since it's, in fact, a courtesy provision without any additional duties or responsibilities.

There is another item that I also wanted to mention at the same time, although it's not directly connected to the resolution on this. It's implicit. And that is that this new position is to be called either Vice Chairperson when referring to them formally or Vice Chair, not Vice Chairman or Vice Chairwoman.

And this has been an issue for as long as I've been on the Air Sources Board. And so I want to take a minute. I believe there's only one member of this Board who's ever actually asked me why it was that I chose to be referred to as Chairman?

This, in fact, dates back to my first time of service on the Board, when -- this is in the 1970's remember -- as a feminist, I was arguing that the title was just the title of the position and didn't, in fact, implicate whether the person was male or female. I thought that the more correct gender-neutral approach to this, was to use the historic title.

Since that time, however, the legislature has actually seen fit to, in a sweeping vote, change every single title of Chairman in every Board or Commission in the State of California, is now, in fact, a Chairperson. So this is not just something that is happening arbitrarily. This is based on the Air Resources Board once again making sure that we are acting in strict

conformity with the edicts of the legislature.

(Laughter.)

CHAIR NICHOLS: So I have decided that I'm -- I'm just letting you know that when we get new stationary, and hence forth in our emails and meetings and so forth, that I am no longer going to be Chairman Nichols. I am either Chairperson Nichols or Chair Nichols. So I think this could be a major change or it could be that no one will notice, but I felt I should at least let you all know that this is about to happen.

But in any event, what that means is that we now have a resolution to create a position and to appoint a person as Vice Chair or Chairperson.

And so I call for any questions, comments or a motion?

16 Yes.

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17 BOARD MEMBER SERNA: Well, Chair Nichols.

(Laughter.)

19 CHAIR NICHOLS: I thank you.

20 (Laughter.)

BOARD MEMBER SERNA: I would like to suggest that we consider appointment of our esteemed colleague Sandy
Berg to serve as Vice Chair or Chairperson for our Board.

I've had a chance to work with Sandy closely over the last year, and certainly come to -- certainly respect her

dedication to all things ARB. And I know that she actually attends the meetings. I don't know that you've ever missed a meeting, since I've been here. It's been a couple years, but I would like to make that motion that we appoint Sandy Berg Vice Chair, Chairperson to this Board.

CHAIR NICHOLS: Okay. Very good. Do we have a second?

BOARD MEMBER MITCHELL: I'll second.

BOARD MEMBER BALMES: I'll second the second.

CHAIR NICHOLS: We should make a second nomination here.

BOARD MEMBER BALMES: But I would just like to say personally that I can't of a better person to be Vice Chair than Sandy Berg. I think -- my line about her is that she's the hardest working Board member, outside of Chair Nichols.

(Laughter.)

BOARD MEMBER BALMES: And so I just -- I think it's a great idea, and will allow for a seamless meeting leadership when the Chair may have to be away.

CHAIR NICHOLS: Great. Thank you. Any other necessary remarks here?

If not, we can just have a vote. We have a Resolution number 15-42 in front us. We have a motion and a second.

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So all in favor, please say aye?
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             (Unanimous aye vote.)
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             CHAIR NICHOLS: I didn't close the nominations.
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 4
    I'm sorry, but I guess it wasn't really necessary.
5
             (Laughter.)
 6
             CHAIR NICHOLS: Any opposition?
7
             Hearing none. All right. This is terrific.
8
    Thank you so much.
9
             (Applause.)
10
             CHAIR NICHOLS: All right. Moving right along
11
           I feel like it should come at least with, you know,
    here.
12
    a bouquet or something.
13
             (Laughter.)
14
             CHAIR NICHOLS: Maybe later.
15
             Okay.
                    Thank you so much for agreeing to do this,
16
    Sandy.
            It's going to be a big help to me and all of us.
17
                    The next item is a presentation on the
18
    staff's evaluation of the greenhouse gas determination for
19
    the Kern County Council of Governments Sustainable
20
    Communities Strategy, otherwise known as the SCS.
             The Kern Council of Governments adopted a
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22
    Sustainable Communities Strategy last year, in accordance
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    with SB 375. Today, we are going to see the staff's
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    modeling results -- their technical evaluation of the
25
    modeling I should say that underlines the COG's greenhouse
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gas quantification.

This item involves a formal Board action to either accept or reject the Kern COG's determination that its SCS meets the greenhouse gas emissions reduction targets that were set by this Board. I'm pleased to see that we have representatives of the Kern Council of Governments here today. We welcome them and thank them for coming.

Mr. Corey, would you please introduce this item?

EXECUTIVE OFFICER COREY: Yes. Thank you, Chair

Nichols. In 2010, the Board set per capita greenhouse gas
emission reduction targets for the 18 metropolitan

planning organizations, or MPOs, in California under SB

375. For the eight MPOs in the San Joaquin Valley, those
targets are five percent per capita reduction by 2020, and
10 percent per capita reduction by 2035.

ARB's role in implementing SB 375 also includes evaluating greenhouse gas determinations prepared by the MPOs, and either accepting or rejecting each MPO's determination that is Sustainable Communities Strategy, or SCS, would be meet the targets.

Staff's evaluations are based on a general technical methodology that was developed in 2011 and has been used to evaluate 12 other SCSs. The first round of regional transportation plans and SCSs for the San Joaquin

Valley were completed last summer. Previously, you've considered the SCSs from the Fresno, the San Joaquin, and the Stanislaus Counties.

Today, you'll consider another SCS from the valley, that of Kern Council of Governments, or also known as Kern COG. ARB staff has been working with the Kern COG staff over the past several months to obtain and analyze the necessary information to complete our evaluation.

Kern COG provided staff a copy of its travel model; the ability to run this model facilitated staff's evaluation of the greenhouse gas quantification.

We have representatives, as noted, from Kern COG here today in including Ahron Hakimi, the Executive Director, who will speak after staff's presentation.

I'll know ask Amy Volz to begin the staff presentation.

Amy.

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(Thereupon an overhead presentation was presented as follows.)

AIR POLLUTION SPECIALIST VOLZ: Thank you, Mr. Corey and members of the Board. This is the fourth of the San Joaquin Valley's Sustainable Communities Strategies presented to the Board.

In today's presentation, I will briefly describe the Kern County region, highlight the key elements of the

Sustainable Communities Strategy adopted by the Kern Council of Governments, also known as Kern COG, and summarize the results of staff's technical evaluation of Kern COG's greenhouse gas quantification.

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AIR POLLUTION SPECIALIST VOLZ: Under SB 375, the Air Resources Board has the responsibility to set passenger vehicle greenhouse gas reductions targets for California's 18 metropolitan planning organizations, or MPOs. In September 2010, the Board set targets for each of the eight MPOs in the San Joaquin Valley, including Kern County at five percent per capita reduction by 2020, and 10 percent capita reduction by 2035.

To achieve these targets, Kern COG developed its 2014 regional transportation plan and Sustainable Communities Strategy, or RTP SCS. It includes strategies that focus growth in existing urban areas encourage more jobs in housing near transit and increased opportunities for transit and active transportation, such as biking and walking.

The combination of land use and transportation strategies and the 2014 RTP SCS would enable the region to reduce its development footprint by 2035, compared to the previous RTP adopted in 2011.

The SCS reflects sustainable development policies

from the recently updated general plans, climate action plans, and sustainability plans of several cities in the region, including Maricopa, Delano, Ridgecrest, Taft and Tehachapi.

These plans and policies demonstrate a willingness of local communities to implement the types of sustainable development and transportation strategies found in the 2014 RTP SCS.

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AIR POLLUTION SPECIALIST VOLZ: Kern County is the largest county in the San Joaquin Valley, directly north of Los Angeles. There are two major north/south transportation corridors, Interstate 5 and Highway 99, which carry a large amount of freight traffic through the county. The region is mostly rural, and nearly 1/4th of the county's jobs are in agriculture or natural resource extraction.

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AIR POLLUTION SPECIALIST VOLZ: The county IS currently home to almost 850,000 people and is projected to grow to almost 1.5 million people by 2014, which is the horizon date of the regional plan. In this map, the population of the 11 incorporated cities is represented by the size of the gray circles. The largest city in Bakersfield with a population of almost 350,000.

The larger Bakersfield metropolitan are is home to over 500,000 people, or almost 60 percent of the county's population. This will continue to be the major urban area of the county with about 65 percent of new growth forecasted to occur here.

Delano, Ridgecrest, and Wasco are the next largest cities, all with populations under 55,000. About 30 percent of the region's population lives in numerous small rural communities.

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AIR POLLUTION SPECIALIST VOLZ: This map shows that 70 percent of the land in Kern County is dedicated to non-urban and public uses. The various shades of brown indicate federal and State land holdings, farmland, mineral resource areas, parks, desert, and habitat preserves. Only about six percent of the county's land area is covered by the 11 incorporated cities.

This resource-focused economy contributes to a dispersed employment base with most of the region's job centers located in rural areas outside population centers.

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AIR POLLUTION SPECIALIST VOLZ: Kern COG's SCS addresses the challenges of a dispersed employment base, through land use and transportation strategies for both rural and urban areas. Land use strategies in the urban

areas are focused on shortening vehicle trips by encouraging infill development, diversifying the housing stock with more compact housing, and more jobs and housing near transit.

For example, the RTP SCS anticipates approximately 20 percent of new development will be added to infill areas in metropolitan Bakersfield. The focus on infill development within the existing urban areas will help to promote transit use, as over 60 percent of all housing and 75 percent of all jobs would be located within one half mile of a transit station by 2040.

Kern COG will also add over 700 miles of new bike lines to promote active transportation throughout the region, including downtown areas and regional connections. In the metro Bakersfield area, there would be new express bus and rapid bus routes, in addition to three new bus transfer stations, helping to connect jobs and employment within and between urban areas.

Because carpooling is a significant travel mode for commuters, the SCS promotes carpooling and vanpooling to employment centers in rural areas. Kern COG plans to expand the number of vanpools and increase the number of park-and-ride parking spaces region wide. Kern COG's first carpool lanes will be in place by 2040.

Kern COG projects that if all these strategies

are implemented, the region would be able to achieve per capita reductions of about 14 percent in 2020, and about 17 percent in 2035.

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AIR POLLUTION SPECIALIST VOLZ: The 2014 RTP SCSs move to creating a more sustainable growth pattern is reflected in expected changes in population density. These figures depict the historic and currently forecasted pattern of new growth in the metropolitan Bakersfield area, where most of the new growth will occur.

The figure in the upper left represents the dispersed low density distribution pattern that was projected in 2006. In the upper right, we see that the prior RTP begins to discourage growth on the urban fringe by bringing new development closer to the city's center.

The bottom figure represents the more compact urban form based on the 2014 RTP SCS further concentrating growth in the downtown area.

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AIR POLLUTION SPECIALIST VOLZ: Recent development projects are revitalizing the downtown area by bringing in more residential and commercial uses. This slide highlights several projects that have been built in the past few years in Bakersfield.

The Baker Street Mixed Use Development featured

in the upper left consists of 37 residential units, over 10,000 square feet of community and commercial space. The Bakersfield Arts Alive District in the upper right covers 16 blocks with residential and commercial space and incorporates the oldest building in Bakersfield and a historic hotel. The Mill Creek District in the bottom photo includes commercial development, senior and market-rate housing, and parks. Each of these projects has one recognition from the San Joaquin Valley Blueprint Awards Program.

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AIR POLLUTION SPECIALIST VOLZ: Recognizing that it takes resources to implement the SCS, Kern COG has actively pursued and obtained State discretionary funding to implement sustainable development projects. This year, Kern COG will receive \$2.6 million in affordable housing and sustainable communities funds from the Strategic Growth Council for a senior citizen apartment project in downtown Bakersfield.

And another \$3 million for a vanpool expansion project targeting farm workers in several counties, including concern. Kern COG has also been awarded approximately \$300,000 from the Caltrans Low Carbon Transit Operation Program. This funding will be used to enhance bus shelters, install solar righting, implement

GPS vehicle locating systems, add transit security cameras, and will cover cost of transit operation and the purchase of bus passes for low-income riders.

In 2014, Kern COG received approximately \$8,000,000 in Caltrans active transportation grants, more than any other MPO in the valley. These funds will be used for both local and regional pedestrian infrastructure improvements, such as improved lighting, sidewalk improvements and construction of walking paths.

To help address mobility needs in rural areas, Caltrans recently awarded a \$500,000 transportation planning grant to the eight valley MPOs and the University of California at Davis, Institute of Transportation Studies, who will jointly conduct a shared access pilot program. This program will look at car, bike, and ridesharing options, as well as other alternatives that may meet the mobility needs of rural communities in the valley.

Just last month, the ARB Board approved a funding plan for fiscal year 2015-16 that will provide an additional \$37 million for light-duty vehicle pilot projects to benefit disadvantaged communities. One of these pilot projects will target turnover of the agricultural worker vanpool fleet in the San Joaquin valley, providing additional State resources to ensure

that vanpool operators in this region have access to clean vehicles.

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AIR POLLUTION SPECIALIST VOLZ: The next half of the presentation addresses ARB staff's technical evaluation of Kern COG's greenhouse gas quantification, which followed the evaluation process described in our July 2011 technical methodology paper. Staff looked at four key components of an MPO's travel demand modeling system in order to understand how the MPO quantified the greenhouse gas reductions from the SCS.

These components include the performance indicators, modeling tools, data inputs and assumptions, and the model's sensitivity to the strategies in the SCS.

I will briefly describe five performance indicators in then next slide.

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AIR POLLUTION SPECIALIST VOLZ: This performance indicator is for the metropolitan Bakersfield area only, since the majority of the region's projected growth will occur here. This graph shows the difference in average residential density between the prior 2011 RTP and the 2014 RTP SCS, using a dwelling-units-per-residential-acre metric. The average density would increase by about 40 percent with the 2014 RTP SCS, as compared to the prior

RTP.

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represents a notable departure from the historic trend of large-lot single-family home construction. In this graph, the two bars on the left represent single-family housing, and the bars on the right represent a combination of small lots single-family and multi-family housing units. Again, this represents new development for metropolitan Bakersfield.

The percentage of single-family housing would decrease from nearly 80 percent to about 50 percent of all new housing units, while small lot and multi-family housing would increase from about 20 percent to about 50 percent of all new housing units.

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encourages more growth in housing depicted in the left in the slide and jobs depicted on the right near existing and future transit service throughout the county. By 2035, the SCS would result in significant increases in the number of housing units and jobs within a half mile of a transit station or a stop, as compared to the prior RTP.

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AIR POLLUTION SPECIALIST VOLZ: The 2014 RTP

budget of approximately \$12 billion through 2040 shows a shift in the region's funding priorities. Compared to the prior RTP, the 2014 RTP SCS allocates a smaller share of total funding for roadway expansion and a greater share of total funding for transit and bike and pedestrian infrastructure.

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AIR POLLUTION SPECIALIST VOLZ: We also looked at the trend between per capita vehicle miles traveled, or VMT, and CO₂ emissions. The blue line in this graph shows what the decrease in the daily VMT per capita in 2020 and 2035 would look like, based on the COG's data. The green bars represent the decrease in per capita CO₂ emissions over the same time period.

Although the recession contributes to this sharp decrease between 2005 and 2020, the trend is what we would expect with a continued decline of per capita VMT and CO_2 Avenue 2020.

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AIR POLLUTION SPECIALIST VOLZ: Kern COG provided ARB with a copy of its travel demand model, which is based on the Cube software and similar to other valley models. To evaluate alternative land-use scenarios, Kern COG used UPlan, a web-based land use decision support tool used by several other small MPOs.

Staff also reviewed model input assumptions regarding demographics and growth forecasts, the region's current and future land use and transportation network, and auto operating costs. We found these assumptions to be reasonable and similar to those of other value MPOs.

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AIR POLLUTION SPECIALIST VOLZ: To determine if the model was adequately sensitive to the SCS strategies, ARB collaborated with Kern COG staff to design and run sensitivity tests on several land use and transportation variables. These include transit frequency, residential density, proximity to transit, and household income.

Based on the results of these tests, the model's response to these variables is consistent with the empirical literature.

In it's draft SCS, Kern COG attempted to quantify the effect of individual SCS strategies and model assumptions on greenhouse gas emissions, and concluded that a higher auto operating cost in a 2040 scenario would result in about eight percent per capita reduction in emissions. After the SCS was adopted, ARB staff and Kern COG staff collaborated to perform additional sensitivity tests to clarify the effect of auto operating cost. Based on these further sensitivity tests, ARB staff concluded that the effect would be closer to a three percent

reduction by 2035. This result is reasonable and comparable with the results from other MPO's models.

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AIR POLLUTION SPECIALIST VOLZ: Based on the results of its technical evaluation, staff recommends that the Board accept Kern COG's determination that its 2014 RTP SCS, if implemented, would meet the region's per capita greenhouse gas emissions reduction targets for 2020 and 2035.

This concludes staff's presentation. Now, I would like to invite the Executive Director of the Kern Council of Governments, Ahron Hakimi, to address the Board.

CHAIR NICHOLS: Good morning.

MR. HAKIMI: Good morning. Thank you for the opportunity to speak, Madam Chair.

My name is Ahron Hakimi, and I'm the Executive Director of Kern Council of Governments based in Bakersfield. I'd like to thank ARB staff for its very thorough evaluation of our 2014 SCS methodology. I'd like to specifically thank Amy Volz, Jonathan Taylor, Terry Roberts, Nesamani Kalandiyur.

(Laughter.)

MR. HAKIMI: Jin Xu, Jennifer Gray, and, of course, Lynn Terry.

The technical evaluation is nearly twice as many pages as our SCS. It was extremely thorough.

(Laughter.)

MR. HAKIMI: It's no longer business as usual in Kern. Our diverse stakeholders provided significant input resulting in a challenging and very ambitious SCS. We believe our open public process garnered the broadest participation possible, making for a successful grassroots document that is changing the course of our region.

We were driven by local health-based criteria pollutant concerns. Kern COG is working hard to realize the SCS benefits on an accelerated time frame. Here are some of the -- here is some of the progress we're already making towards our goals.

More than 50 percent of the vehicles on Kern roads already have two or more passengers. And this is anticipated to grow alongside new car sharing markets. To build on this success, Kern COG has shifted staff to assist our member agencies to develop workplace vehicle charging.

Kern County provides two and a half times as much alternative energy as the next largest county in California. We are on track in Kern County to permit enough alternative energy generation capacity to meet the majority of the State goals.

The private sector is already working to implement our SCS strategies. The Wonderful Company, a major grower in the State, contributed \$15 million in the disadvantaged community of Lost Hills, which is about 45 miles northwest of Bakersfield, providing more than 700 trees, seven miles of sidewalks, bike trails, and a community center, and a new artificial turf soccer field.

This investment represents five times the funding received by Kern from cap-and-trade funds to date, and is a good example of how private sector can help achieve the SCS goals early.

Of all the challenges we face moving forward, none is more daunting than funding. For our SCS to truly be transformational, we must be able to help finance these projects that best illustrate our environmental and health related priorities. We look forward to working closely with ARB to achieve these economic and environmental benefits as soon as possible. Thank you for your Board's leadership and understanding that one size does not fit all when it comes to meeting our greenhouse gas goals.

CHAIR NICHOLS: Thank you. Congratulations on a project that has now garnered quite a lot of support, I see, from the people who've signed up to speak this morning.

I will turn to the witness list then, beginning

with Andrew Chesley from the San Joaquin COG.

We don't have these up on the wall today, I guess. I'll just -- oh, they're behind us. There they are. Okay. Great. Thanks.

MR. CHESLEY: Thank you very much Chair Nichols, Vice Chair Berg and members of the Board. I'm representing the San Joaquin Valley Regional Executive Directors. I'm the Chair this year.

We're winding down on the first round of SCS development, but I think we found that it's been kind of enlightening. It's been a rewarding experience as well as a challenging one.

Great partnerships have been strengthened during this process between valley MPOs, the valley MPOs and ARB staff, and between the valley MPOs and non-governmental organizations that are involved in community development, health, and the environment. That has been maybe the landmark from all this effort. I'm here to support your staff's recommendation.

Kern COG has produced an SCS that not only meets the targets that you've set, but it's changed the nature of the discussion in regional transportation plan development in their county. They have done excellent outreach in an area that is exceptionally diverse as counties go. They have taken new steps to title land use

and transportation together, which I think was the objective really when it came to SB 375.

The next round of SCS development and the implementation of the existing SCS are now our priority for all of us. Valley MPOs, and I know Kern COG as well in this, are committed to continue with the partnerships we have developed and in strengthening the SCS process that we have done through this first round.

I support your staff's recommendation. Thank you very much.

CHAIR NICHOLS: Thank you.

Ms. Wise.

MS. WISE: Good morning, Chair, members of the Board and staff. My name is Ella Wise from the Natural Resources Defense Council.

And I wanted to congratulate and show our appreciation to Kern COG for their effort to be transparent. And although it led to a lot more work for a lot of you, we so appreciate that effort.

Also, we want to thank the ARB staff for looking closely at this issue of the role of active land use and transportation strategies versus the role of independent assumptions and achieving the targets. Thank you for your work. It seems like a great example of the State and regions working together to achieve climate goals.

And with that, we look forward to supporting implementation, helping fund -- helping to find funding for implementation, and revisiting Kern COG and the valley's regional targets in the next round.

Thanks very much.

CHAIR NICHOLS: Thank you.

Mr. Barrett.

MR. BARRETT: Good morning. I'm Will Barrett with the American Lung Association of California.

I want to first thank ARB staff and the Kern COG staff for the thorough review and the work to get this analysis completed. I think that's wonderful work. Our staff and I also worked closely with the COG as they developed the SCS development, and really just wanted to take a moment to just praise their efforts to include health quantification in the process.

You know, a lot of places -- you know, COGs would like to try and do this, but they took a real shot at it. So I really wanted to flag that for you all.

The first round of the process certainly raised a lot of issues that have been addressed through the review process, the economic assumptions, the modeling improvements. And understanding these issues for Kern really feel like we're going to benefit the SB 375 program broadly.

The main comment that I'd like to make, and it's one we've made in the past, throughout the whole process is the overachievement of the targets in the Valley in the first round really indicates that the targets are more achieveable than initially thought.

We're very happy too see Kern and others coming in with exceeding the targets. But now that these processes are moving forward, and we're understanding better the modeling and other assumptions, we think that they should be reevaluated, because there are so many important processes coming out for the State.

We have the Governor's 50 percent petroleum reduction goal, the 2030 carbon targets, the upcoming ozone standards. SB 375 is going to be critical to all of these processes, and we think that, you know, we really need to reevaluate where the targets were set in light of the successes that the COGs are making.

So as the scoping plan comes forward this year, the three-year investment plan comes forward, I would just urge you on the Board to really recognize that these plans are going further than expected, they need more support than they're getting to be fully implemented, and want to work with the Board and the COGs to continue the success as we go forward.

And finally, for Kern, and I see Andy here from

San Joaquin, we're very happy to continue offering Lung Association resources at the local level to help identify and support, write grant letters, that kind of thing to get good projects in the valley that are going to clean up the air. So thank you very much.

CHAIR NICHOLS: Thank you.

MS. KNECHT: Good morning. My name is Carey
Knecht with Climate Plan. We've been following SB 375
implementation around the State. And I wanted to start by
thanking the Board for again your continued attention to
SB 375.

This presentation today I think provides just a hint of the many, many benefits that attention to integrating land use and transportation can have, not just on greenhouse gases but also on health, on equity for rural and urban disadvantaged residents, and for all of the goals that we're working together across the State to achieve.

I also would like to thank ARB staff for this very thorough review. I always learn a great deal from these technical analyses of the SCSs, and appreciate the time that goes into them, and also want to congratulate and thank Kern for this finding that they have -- that there's an SCS that has achieved these targets through integrated land use and transportation strategies. So I

just wanted to start by congratulating and thanking so many people involved in this.

Most of my comments relate to what we can learn from this as we move forward into the target-setting process. I particularly was interested and looked at this for what it said about auto operating costs. I think we all were alarmed when we saw the table initially that said that a great portion of the targets would have been met by auto operating costs. Although, I do really want to highlight that as a best practice, that every MPO could provide an analysis of how those targets are being met, and that that is a great approach.

If they were to be meeting it largely through auto operating costs, I think that has a significant -- raises significant concerns, both for whether we would actually achieve those reductions and also for the impact on low income households.

So I was very happy to learn that it was not a significant, that only about three percent out of the 10 percent target was met through auto operating costs. But I think as we move forward into target setting it's really important to remember that it is still a very significant component, about 30 percent of the target. And so we should be very careful as we set those target-setting processes to think about how we will set a baseline or

otherwise keep that from being a very big variable that moves the dial and set that up front.

Also, as we move forward, I'll just note that this is -- you know, Kern was yet another of the valley COGs, joined several others for whom business as usual, or in the case the old plan, would have met the targets. It would have achieved 14 percent reduction. And so despite what I think we all thought at the time, I think what we've found is that the targets were not necessarily that ambitious, if your old plan meets it or actually overshoots it by almost 50 percent.

And so I look forward to a conversation about how we can make the targets for the Valley and the whole State as ambitious as possible.

Thank you.

CHAIR NICHOLS: Thank you, Ms. Knecht.

That concludes the list of witnesses that I have, so I will close the record at this point and turn to Board members for any questions or comments that they may have.

Dr. Sperling.

BOARD MEMBER SPERLING: First of all, I want to note that our audience are very last learners on titles.

(Laughter.)

BOARD MEMBER SPERLING: I'm very, very impressed by that.

I -- so I have -- I'd like to comment on this more broadly, because we've heard a lot of SCSs, and I think we've -- so I want to comment more broadly on the whole SCS and 375 process.

I would say that, you know, in this particular case, I think -- I did actually read the whole report, and I was very impressed. Staff did a very good job. And I was also impressed that the local governments have done a good job really, and I think they've really responded to this whole 375 process in a way that is positive, it is good, because they were these comments about grassroots, and changing the nature of the discussion.

And I think that's what this is -- you know, number one, that's what this is all about, number two are the outcomes, and I'll get to that in a moment.

So I'd like to suggest that it's time to rethink how we handle these SCSs at ARB. So I have three major thoughts. So I did share these with the staff, so they're not going to be too shocked by this, and I think they largely agree, but we'll see.

(Laughter.)

BOARD MEMBER SPERLING: Number one is we should be standardizing many of these assumptions and parameters that are used. It doesn't make sense for every MPO, every COG to be doing its own forecast of gasoline prices of

vehicle efficiency of price elasticities. These are numbers that are not specific to local area, and more than that, no one knows what they should be anyway.

So let's standardize those. And it's going to save a lot of time for the MPOs, and it's going to save a lot of time for the staff. Staff spent a huge amount of time trying to dig into the model and understand what the result -- why they came out the way they did. You know, this idea about the operating costs, which is really gasoline prices, which incidentally I think is done wrong anyway, because those forecasts are based upon increasing costs. And I suspect what's going to happen is that costs are going to diminish because gasoline prices are unlikely to be going up a lot in the future.

I mean, that's my own little aside. But given that, there's a lot of uncertainty, so let's just standardize and make it easy for everyone, save everyone a lot of money and grief.

And so the first suggestion on that is let's have ARB staff issue some kind of directive to the MPOs. That will give them direction on these parameters and assumptions that are State specific or highly uncertain, and not locally specific. Okay. That's number one.

Number two is that as -- there was -- okay, so there was comment here that the staff report was twice as

long as the -- you know, the SCS. There's something wrong there. That's not the way it should be, so -- and I understand how we ended up either way we did, but I think now is a good time to reassess the whole process.

Let's shrink these evaluations. Let's reduce them, and let's have them look more like memorandums that are focused on key issues, instead of trying to focus on doing a full blown evaluation of the model, of the whole description of the whole region.

Okay. And number three, last, is I think it's time to shift the evaluations away from being just on the models and the targets and shift them towards actions and outcomes. I mean, that's really the point here. The point isn't to create bureaucratic requirements and, you know, spend all time and money on models. I love models. You know, I'm a professional modeler, I guess, of sorts, but that's not the point here.

You know what we want to see is change. And so I'm really heartened by the discussion about, you know, there's changes at the grassroots level. There's changing the discussion. And that's really important. That's what we want. So I would suggest that what we want these reports to do is be more of an evaluation or an assessment of what actions have actually been taken, and what impact they've really had.

And one of the research projects we just approved is going to help do that. It will be a couple years, but that's the direction we should be moving in, I think. And so -- and this is the goal of 375 is change and actions and outcomes.

And I would note that I think the process -- the 375 SCS process has been very effective -- well, I wouldn't say very effective -- has been effective across the State in many of the -- in most of the MPOs and local governments already, because it has changed the discussion. You know, I know with SCAG was probably the big victory.

You know, when they started out, you know, they thought this whole process was a bunch of phooey, that they knew how to do transportation, and who -- you know, who are these bureau -- who are these regulators in Sacramento telling them what to do.

And they really came around, because they realized that everything we're talking about with the SCSs is really the strategies to achieve these greenhouse gas reductions are the shame strategies that will be -- that they want to do anyway for a whole number of other reasons, to reduce infrastructure expenditures, to increase livability, health -- public health.

And so everything -- things are aligned. And I

know the big issue is money. And I know lots of us are committed to trying to figure out how to get more money to the MPOs and the local governments that really are doing -- are taking actions.

But even short of that, what we've learned with some of these SCSs in these reviews is that by focusing on these strategies to reduce greenhouse gases to create more livable communities, to reduce VMT, they're actually reducing costs. They're reducing investments that are needed in roads, because shifting it to other ways of improving accessibility and mobility.

And what we've learned, especially with the COGs and MPOs in the San Joaquin Valley is that they've been spending a huge amount of money on conventional transit. And so the study that was referred to is looking specifically on how to provide better accessibility at less cost. And there's a lot of ways of doing it, and so there's a real commitment there, I know, to looking at it. And that's going to save money and provide better transportation.

So, you know, I do say that the SCS process has been positive. It can -- of course, there's a lot more that can and should be done. But I think this is a good time for us to start rethinking how -- how we manage our oversight of this process. And this kind of provided a

good illustration of what we can do or should do. So sorry for the long --

CHAIR NICHOLS: I'm going to ask the staff to respond after the other Board members weigh in with whatever comments they might have.

Dr. Balmes.

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BOARD MEMBER SPERLING: Thank you, Chair.

BOARD MEMBER BALMES: Well, first off, I would echo my thanks for good efforts on the part of Kern COG, and -- actually and the non-governmental organization stakeholders that we've heard from, as well as CARB staff. But I wanted to also echo what Professor Sperling said about trying to come up with standardized metrics for evaluation of SCSs. I totally and completely agree with him.

I do a little modeling too, but I wouldn't call myself a professional modeler.

(Laughter.)

BOARD MEMBER BALMES: But I have one little -CHAIR NICHOLS: I do too. When you say modeling,
I do tend to think of something a little different. We
were laughing up here.

(Laughter.)

BOARD MEMBER BALMES: You know, I have tried -- CHAIR NICHOLS: It is a nice time, mind you.

BOARD MEMBER BALMES: I have tried to improve my --

(Laughter.)

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BOARD MEMBER BALMES: -- you know, my wardrobe since I've been on the Board.

(Laughter.)

BOARD MEMBER BALMES: Okay. So seriously, I have one concern on -- you know, it's about slide 15, where, you know, we have this impressive drop in per capita VMT and CO2 emitted between 2005 and 2020. But then there's this leveling off between 2020 and 2035. I realize that's a few years off, but if we want to meet the ambitious goals that our Governor has set forth with regard to trying to mitigate climate change though reduction of CO2 emissions, then we have to do better in that 2020 to 2035 period and I -- so I just wanted to make that point that while I'm congratulating our short-term efforts here, in the longer term we really have to do better, Madam Chair.

CHAIR NICHOLS: Okay.

Ms. Mitchell.

BOARD MEMBER MITCHELL: Thank you. And a big thank you to staff. I know they worked really hard on this SCS, and you've accomplished a lot. So thank you to our staff.

I want to also express appreciation for Professor

Sperling's comments, because I think they're particularly apropos at this time in our development. What we're seeing now is SB 375 is growing up, and we've had, in some jurisdictions, a couple of rounds. And I think Dan is absolutely right -- Professor Sperling is absolutely right, that SB 375 was a planning tooling. And now, let's look at what the results are of that planning. So I think in the future, we need to look at what are the results, what is the outcome, have we accomplished what we intended to accomplish with reductions of VMT, reductions of greenhouse gases?

So I look forward to that. And we know that the Kern COG will be back in 2017, and we will be reevaluating again what they've accomplished. But the point that Dr. Balmes raised about what are you going to do between 2020 and 2035, can't we reduce that a little bit more, and also in light of the Governor's recent executive order in SB 350 that is now making it's way through the legislature on these other reductions, we'll be interested in seeing what is proposed in the future with our Sustainable Communities Strategy. So these are very good comments from you, Professor Sperling. Thank you for your overview and your oversight, which is broad and useful to all of us.

Thank you staff.

CHAIR NICHOLS: If this were the Senate, you

would say you associated yourself with his remarks.

Supervisor Roberts.

BOARD MEMBER ROBERTS: Yeah, I just want to weigh in on part of this that concerns me, and just reflecting back on some history. I can remember the early nineties there was a lot of projections that were done on air quality issues based on VMT. None of them proved to be right. It proved to be a very bad indicator. It wasn't a good metric to use.

We continue to use it like it's some infallible connection. And I think the strengthen in this program is probably that it's going to be adjusted every few years, and a fresh look is going to be take, which allows us to then incorporate the changes, both technological and regulatory that are occurring that are changing the playing field.

But we look out and we look at the year 2035, and I will tell you that's so far beyond our crystal ball as to be, in my mind, almost ludicrous to be criticizing or thinking that this is a good model. And it's not about your wardrobe.

(Laughter.)

BOARD MEMBER ROBERTS: We done have the techniques that give us a very accurate picture that far out. And it's all you've got to do is look back over the

last 20 years and make comparisons.

I know in our case in San Diego, and I remember it was a huge issue for me 20 years ago, we had a professor from UC who was running around telling us that we couldn't do anything unless we reduced VMTs, the air pollution was going to continue to climb. And, in fact, our VMTs have gone up significantly. The population has gone up. His response was we had to reduce the number of jobs, and that way people wouldn't want to live in San Diego and that was a great solution.

(Laughter.)

BOARD MEMBER ROBERTS: But at the same time, all of these things have happened, dramatic reductions in air pollution for a whole lot of reasons that 20 years ago were probably hard to see. So I just -- I want to caution us. Once -- you can look at that first bar, but when you start to look at that second bar, you need to put a lot of skepticism in that.

And we -- I would just caution. There are probably reasonable programs to start now, but I wouldn't put a heavy burden on local communities to try to now affect that, but I think we look at it, just as we've done on this Board, where we had sort of the black box, if you would, and we knew that we had to bring more regulatory effort and more solutions as we went on and things

developed and technologies developed. And sometimes you took a step back when you had to pull back on the electric car mandate, because we found that electric cars that first came out were really pretty lousy, and the market wasn't going to accept those, no matter what our edicts were from here.

So I just -- I want to caution whenever I see

VMTs that I suspect that the playing field is going to

change dramatically by 2035, and I would be cautious of

being too critical. The fact that they're making

progress, and I think they'll continue to make progress,

and I think things that are not programmed in and things

that we can't even begin to model right now are going to

have a dramatic effect, if we keep the goals in mind. In

each renewal of the plan we keep the goals in mind and

continue to work to reduce these things, it's going to

happen.

But I would just be very, very suspect. And I know we have some at the State level who like to punish local communities on the basis of these long range projections that I think are dubious at best

CHAIR NICHOLS: Supervisor Serna.

BOARD MEMBER SERNA: Thank you, Chair. So I -this is a conversation that I'm glad we're having this
morning in the context of the most recent SCS to come

before us. I've had a chance, like others on this Board, to discuss this with staff -- our staff, as well as even our local staff at SACOG, the MPO for the area that I represent.

And on the subject of standardization, I'm really curious to know from staff whether or not there's -- we're still in a kind of a State of apples to oranges, in some cases, relative to the scaling of an availability of modeling between single county MPOs, for instance, versus multi-county MPOs. My understanding is that the history of this, the first round of SCSs, there was some setting of expectations that perhaps there would be a universal modeling platform that could be used for either.

So while I appreciate Professor Sperling's overall comments and certainly the concept of standardization of assessment and modeling, I'd kind of like to hear some comments from the staff about that particular part of it.

With regard to my colleague, Supervisor Roberts, I think, you know, I completely appreciation -- we're both public servants in local government, so I can completely appreciate having to sometimes work within the rigid guidelines set in State statute. And in this case, even though VMT may not be the most appropriate or accurate surrogate for greenhouse gas reduction CO2 in particular,

it is the law.

So we are -- my understanding is we're trying to do what we can within the parameters of the law, and it's -- you know, it's not perfect. I would challenge anyone to show me any law, certainly relative to land-use planning, that is perfect.

So, you know, we work in an area that's, you know, different measures of gray, never black and white. And so I appreciate that as well, but I would like to have a response from staff on the scalability and kind of the universal nature of modeling or not.

CHAIR NICHOLS: Well, why don't we just take that issue right now then, since it's been brought up several times.

DEPUTY EXECUTIVE OFFICER KARPEROS: One of the -one of the benefits that's come out of the implementation
of SB 375 over the last four years has been the increase
in standardization among assumptions -- of the
assumptions -- input assumptions by the MPOs, mostly,
quite frankly, driven by the MPOs and their realization
that by reaching out to their peers, they could actually
leverage the capacity across the State, as well as
reflecting the discussions that took place during the RTAC
in the initial implementation of SB 375, that an increase
in transparency of the modeling systems, as well as

increased uniformity would be of benefit.

You're absolutely right, supervisor Serna all -the MPOs all use -- or I shouldn't say all, but many of
the MPOs use different modeling platforms. They consume
different inputs relative to auto operating costs for
example. The -- but it is possible to essentially grow
those inputs and assumptions from a common basis. And
that's what the MPOs in our discussions with the MPOs have
tried to do. So depending on the modeling platform you
have, depending on regional differences, say in fuel
prices, what could be or what is the appropriate
assumptions for your region.

It is possible we think to further standardize. And we would look for that to be a collaborative process between ourselves and the MPOs. We can bring perspectives from ourselves, as well as the other State agencies relative to some of the cost of fuel for example to those discussions. They can bring to those discussions their knowledge, their deep knowledge of how their models work and the data that is available for them.

So it might not be a directive from the Air Resources Board. They tend to not like those, but I think we can push the level of standardization further. And then building what Professor Sperling was saying, if we're spending less time actually having to run the models in

terms of that review, then we can focus on these other types of issues.

CHAIR NICHOLS: Which would be good, clearly. So I'm going to call on the folks on this slide now, starting with Supervisor Gioia.

BOARD MEMBER GIOIA: Thanks. I think for those of us who've been involved developing SCS, there's been challenges in how we continue to move behaviors. Let me speak from that standpoint, because sitting here I see there's an importance in how we can standardize, to the extent we can, understanding that there's regional difference. And those of us on the front lines of developing these are facing tremendous challenges about how we allocate resources, how we're changing behavior changing land-use planning. So I would hope that as we think about this, we understand the challenges that local city council members and county supervisors are facing in advancing this very good policy.

And I think standardizing metrics to the extent that they can be, and I think the term you used is sort of to push a level of standardization further, is the right way to do it. There are going to be regional differences, and clearly making sure that the assumptions that each region is following are truly correct, because what we don't want is a region sort of getting off easy because

they haven't really used the right assumptions.

So I think we can play a role there to make sure that there is integrity and discipline and all the assumptions and metrics. I do think we can have a role in collecting, I don't want call them, best practices, but the approaches that are occurring around the State. You know, different regions are -- you know, are pushing things at different levels, based upon the tolerance for pushing in that region, right?

And there's been a lawsuit -- I mean, our own region. When we adopted -- in the San Francisco Bay Area, when we adopted our SCS, there were lawsuits. We had to settle those lawsuits. So it's harder to sort of just say everything needs to be same, but I think we need to assume that again or just -- or ensure, maybe that's the better word, that the practices have integrity, and that they're all correct or the assumptions for them.

But I think the added role of maybe again providing -- collecting the different types of strategies and practices that are occurring in different regions, and having those available so that folks can take a look at them. I think what's often helpful to us at the local level is looking at the approaches that other people are taking in other parts of the State.

There's nothing more valuable than seeing

something else beginning to work somewhere else. So that's also why collecting information about what's working and what's making a difference on the metrics is helpful, right, because a lot of this is new stuff. We're trying to figure it out as we go.

So if in South Coast, you're taking an approach, and this is truly making a difference on VMTs, you know, and we have some information that measures that, that's helpful to another part of the State as they're looking at that in their next update to the SCS. So I'd like to sort of ask maybe staff how we can sort of collect that in some central location that makes it available for those who want to take a look at the results of the efforts of others

CHAIR NICHOLS: Do you want to respond to that?

Are you prepared to do that at this point, or just take it as a suggestion and say you'll work on it and get back to us?

DEPUTY EXECUTIVE OFFICER KARPEROS: There have been calls for collection of best practices. I think ARB staff's capacity, and if we were able to move away from the sort of input-by-input, model-by-model evaluation that we've done to date -- and we do agree that it's time to shift our focus away from that, that we can apply the analytical capacity that we have and that we've developed

over the last four years for staff, to understand and be able to communicate to the MPOs, the benefits of the various actions across the regions, so that when they're looking to develop the SCS, they have not just a regional modeled estimate of the potential impacts of their SCS. They can look at it at sort of a -- I don't want to call it a project, but a strategy by strategy level to understand will something like that translate to my region?

The MPOs themselves have collected and do share across -- with themselves the strategies that they've been using in their SCSs. They talk regularly. What we can bring to that is an analytical capacity, and focus on that --

BOARD MEMBER GIOIA: I think that's important.

DEPUTY EXECUTIVE OFFICER KARPEROS: -- and help

move them -- move the ball forward that way.

CHAIR NICHOLS: Okay. Any other comments or questions on this side?

Dr. Sherriffs.

BOARD MEMBER SHERRIFFS: I appreciate very much these important overview comments in thinking about where we are in this process and how indeed the process is maturing and how important it is that we keep coming back and examining it. Just a couple of really details in

terms of thinking about the Central Valley.

You know, one is the assumption about auto costs as part of the model. And as was mentioned, on the face of it, this puts a disproportionate burden on the economically disadvantaged. And that really doesn't sound like a strategy. I'm also wondering if that modeling takes into account variations in income poverty levels for an area, or whether it's more broadly applied?

And the other comment, just again in terms of the valley, and although the urban areas are so important in terms of concentrating population and the things that can be achieved with transit and active transit in those areas, while the rural populations are very, very important still in the valley, and so just highlighting how important it is the funding for research, looking at that, and for thinking more creatively about how we involve the rural areas in the transportation issues that we're talking about.

Thank you.

DEPUTY EXECUTIVE OFFICER KARPEROS: I can ask staff to respond to your question about the modeling, but you may not love modeling, so we can be -- we'll do high level review.

BOARD MEMBER SHERRIFFS: I think Dr. Balmes is a wonderful modeler.

(Laughter.)

DEPUTY EXECUTIVE OFFICER KARPEROS: Staff, if you could.

AQPS ASSISTANT DIVISION CHIEF TAYLOR: Good morning, Board members. Jon Taylor here.

Yes, the MPOs in their modeling, they use socioeconomic data that goes into their models. So they're looking at data by household. They're looking at like how many vehicles per household. Importantly, to get to your question, Dr. Sherriffs, they're looking at the income level by household. So they have all the data, you know, that stratifies households by income. And that gets folded into their travel models. And, of course, there are the costs of travel also. So you have auto operating costs. You have the costs of transit all of those things.

So that all plays into what people's decisions are on how they travel. So will they travel by their own car? Will they take a vanpool? Will they take transit? That all gets factored into when they do their modeling, and then when they get their output, about how much VMT is generated versus how many people travel by transit in other modes, and how many people even choose to walk or to bike.

BOARD MEMBER SHERRIFFS: Thank you. And it's important in terms of so many things, because it's

important in terms of how people shop. It's important that people -- how they access cultural activities. I see every day in my practice, people who are paying much more for the transportation to come to the office than they're paying for actually the health care that's getting delivered, because of -- because of issues of access to transportation.

CHAIR NICHOLS: Thank you for that reminder, Dr. Sherriffs. I think we're probably finished with the general questions and comments and ready to move on the resolution.

I just want to add a couple of different thoughts here. First of all, I think the -- this discussion has been very interesting in reflecting once again how big and diverse this State is, and how difficult, but important it is, that we try to find things at the State level that we do that assist in at least raising the floor of the planning and environmental assessments that are being done, while at the same time not trying to insist on uniformity across the State, because there are differences clearly among the regions.

One of the biggest differences in our State, of course, is between those areas that are primarily urban and those that are quite rural. And I couldn't help thinking, as I noticed the shifts in funding that were

being cited, as evidence that there's been a shift in the way that the plan works that the reduction in funding going to maintenance of existing roads is not necessarily something we should all feel happy about.

We have a special session of the legislature going on right now to deal with the fact that there's a enormous shortfall in funding, not primarily, I'm happy to say, due to SB 375. And clearly, the additional resources were needed for transit and for other forms of non-motor transportation.

But having said that, we have a large extensive and important network of roadways in this state that also need to be kept in decent shape for economic, if not other, reasons.

BOARD MEMBER SPERLING: But Chair Nichols, we are responsible for a lot of that problem through the fuel efficiency standards that we've adopted.

(Laughter.)

CHAIR NICHOLS: Yes. Thank you, and I --

(Laughter.)

21 CHAIR NICHOLS: I'll accept the blame on that

22 one.

(Laughter.)

24 CHAIR NICHOLS: I freely admit it. We did it.

25 | We reduced the amount of gasoline that was being consumed.

But the point is that there's a bigger issue out there in terms of how we pay for transportation in the State beyond anything that SB 375 or our greenhouse gas emission standards can do, just an observation.

The other thing though is that also in the news this week has been the conference going on for cities and mayors around the world who are in Rome at the invitation of the Pope to talk about their role in dealing with issues of global climate change and equity.

And one of the things that is apparent here is that the role that SB 375 is playing is an important one, not one that people have really paled a whole lot of attention to, how much is being done by local land use and transportation agencies that actually is contributing to achieving the reductions in emissions that are being called for.

And when we travel, I know when the Governor travels, and certainly when I am talking to other groups, we highlight that as one of our key strategies of California's climate program. I'm mentioning it because as we look at the next round of targets and planning, I think it's worth, not just thinking about ratcheting up the ambition level, but perhaps going back and revisiting some of the things that were decided at the time of the original RTAC about how these plans could be done, and how

we could measure the results of what is happening at the local level, because if, in fact, areas like Kern are achieving more than they originally thought they could, that could be seen as a reason to tell them they need to be more ambitious.

And I'm not opposed to that, but I'm also at the same time wanting to give them credit for what they have been doing. And one way of doing that could be if we change the metric in some way, so it wasn't per capita, but measured the same way we do every other measure that we have as part of our scoping plan, which is in terms of mass emissions, and give credit for those who deserve the credit for the benefits that we're now seeing as a result of changes in the economy, changes in consumer preference, but that's reflected in what the local government officials are actually doing with their plans and with their investments.

So I'm just suggesting that it's worth -- if we're talking about, you know, convening and assessing and thinking about where we're going with this plan, then I would like to add an additional -- and additional factor into it. Okay.

BOARD MEMBER SPERLING: Could I comment on that? (Laughter.)

CHAIR NICHOLS: Yes, you could.

BOARD MEMBER SPERLING: Please?

2 (Laughter.)

CHAIR NICHOLS: Absolutely.

(Laughter.)

BOARD MEMBER SPERLING: I mean, in terms of the specific point, you know, we did, at that time, spend a lot of time trying to figure out the right metric. I think though another way of looking at that would be even more useful and robust would be to think about how to reward the MPOs and the local governments that do reduce their emissions at a more rapid rate, that do take the action.

So, you know, focusing on that idea, I think, is probably a -- and that can translate into the cap and trade revenue. It can translate into the highway -- the united transportation funding, and that should be the focus, I think, as we go forward. You know, really it's rewards with money. I think out there they would agree with that.

BOARD MEMBER GIOIA: Can I make an addition to that comment, Chair?

CHAIR NICHOLS: Please.

BOARD MEMBER GIOIA: I do think that's a really important comment, because there's nothing that gets local elected officials more interested in trying to --

1 (Laughter.)

BOARD MEMBER GIOIA: And say this being one, right?

4 (Laughter.)

BOARD MEMBER GIOIA: -- to move --

BOARD MEMBER SPERLING: Even a professor can figure that one out.

(Laughter.)

BOARD MEMBER GIOIA: Right. Right. To move policy is to have a rewards system and incentivizing through additional resources, because remember a lot of these strategies will take money To implement.

In fact, let me just say, we're -- in Contra Costa County, we're in the middle of devising an extension, and a new sales -- a new transportation sales tax, which we already have, about extending and doubling it. And one of the big discussions is funding for implementing Plan Bay Area our, local SCS.

And there's a big dispute among many of the city councils. You know, how do they prioritize their road investments. You know, the condition of the roads is often poor, versus how do you, you know, get funding. So there's even locally these battles for local dollars over how do you implement the SCS, which we know is not funding, and how do you fund streets and roads. So the

more resources on the table for local jurisdictions, the more policy is going to move.

CHAIR NICHOLS: Well, clearly, this is a topic of great interest, here and in other forums as well. I do think it behooves us to be thinking about how we can be more supportive of the places that are actually seizing the initiative here, and maybe that's the best takeaway message from this -- from this discussion. And appreciate the fact that the staff is already embarking on their efforts for the next round.

So I'm sure we'll have more opportunities to engage as well. I think we probably now should actually focus on Resolution 15-38, since the people from Kern County are waiting to hear from us.

(Laughter.)

2.4

PANEL MEMBER SHERRIFFS: Move adoption.

CHAIR NICHOLS: That they actually will have their approval.

So may I have a motion to approve?

BOARD MEMBER SHERRIFFS: Motion to approve.

CHAIR NICHOLS: And a second?

BOARD MEMBER MITCHELL: Second.

CHAIR NICHOLS: Second.

All in favor, please say aye?

25 (Unanimous aye vote.)

CHAIR NICHOLS: Opposed?

Any abstentions?

Very good. Thank you so much, and thanks for giving us the opportunity to talk about this very important issue.

CHAIR NICHOLS: All right. Our next item is also a very interesting one that's been mentioned at other times in the past, but comes before us in the form of a proposed document that was jointly prepared by the Air Resources Board staff and the California Air Pollution Control Officers Association entitled Risk Management Guidance for Stationary Sources of Air Toxics.

And while the staff are assembling for this item, I'll just say a little bit by way of introduction. Over the past several decades in California, we've seen significant progress reducing public exposure to air toxics, largely driven by industry investments, environmental advocacy, and the implementation of diesel regulations and Airborne Toxics Control Measures that the Air Resources Board and local agencies have implemented. This is a good news story, but it's not over. There's still more work to be done. Diesel particulate matter remains the primary driver for health risk from air toxics in California with freight transport contributing approximately half of these diesel particulate emissions.

This is one reason for our focus on zero and near zero technologies as a critical components to the sustainable freight strategy, State implementation plan, and scoping plan implementation.

At the same time, advances in science are improving our understanding of the potential health risks of our current levels of exposures. And the document before us today discusses how we as an agency intend to address this new information coming to us from the health community.

Clearly, it's important for public health that our programs reflect this new science, which brings us to our item today.

Mr. Corey, will you please introduce the item?

EXECUTIVE OFFICER COREY: Yes. Thank you, Chair.

The Air Toxics Program in California, which includes both stationary and mobile sources is truly a joint effort between ARB, the Office of Environmental Health Hazard Assessment, or OEHHA, and the local air districts represented by CAPCOA. And I personally want to basically extend appreciation to the CAPCOA leadership and staff that they've put considerable work into this as have OEHHA.

And at this point, I'd like to take a moment to introduce our colleagues that are sitting at the table

with staff. We have Dr. Melanie Marty who is representing OEHHA. Dr. Marty's group worked on the OEHHA guidance manual. Next is Joe Jill Whynot who is representing the South Coast Air Quality Management District. Jill is the district lead person on the ARB district risk management team that developed the proposed risk management guidelines for stationary sources of air toxics. And Alan Abbs, who is the Executive Director of the California Air Pollution Control Officers Association. Alan has also participated -- or he participated on the risk management team and he'll be providing some remarks at the end of the ARB staff presentation.

So the staff presentation today will describe the importance of the new science Chair Nichols referred to and how the proposed document will help incorporate this new science into California's Stationary Source Air Toxics Program.

Looking ahead, ARB staff will be going through our existing regulations to determine which regulations may need to be modified to reflect the updated information. And as we do this screening over the next couple of years, we'll bring a report with our recommendations back to the Board for your consideration.

I'll now ask Greg Harris of the transportation and toxics division to begin the staff presentation.

1 Greg.

2 (Thereupon an overhead presentation was presented as follows.)

AIR POLLUTION SPECIALIST HARRIS: Thank you, Mr. Corey. Good Monring Chair Nichols, Vice Chair Berg and members of the Board.

CHAIR NICHOLS: That's a first.

(Laughter.)

CHAIR NICHOLS: Congratulations.

AIR POLLUTION SPECIALIST HARRIS: This item is related to the Board presentation last July when ARB, districts, and the Office of Environmental Health Hazard Assessment, OEHHA, provided an overview of the new science in the OEHHA guidance manual.

Also, at that time, ARB and districts discussed workplans to -- the plans to work together to develop new guidance and tools and independently evaluate our programs, policies, and procedures to implement the new science. I'll begin with some brief background on air toxics in California.

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AIR POLLUTION SPECIALIST HARRIS: California's Air Toxics Program has been very successful in reducing the public's exposure to air toxics. This slide illustrates some of the progress made. Since 1990, we've

achieved approximately a 75 percent reduction in air toxics, despite a growing economy, and approximately 30 percent increases in both number of residents and vehicles.

While these are statewide average statistics for health risk, the health effects near facilities are also reduced and in some cases eliminated due to changes in equipment and processes. The reasons for these reductions include: ARB and district control and permit programs, especially statewide controls on mobile sources and fuels; industry investments in cleaner operations and technology at stationary sources and across the vehicle fleet; and, input by the public and environmental community.

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AIR POLLUTION SPECIALIST HARRIS: California's Air Toxics Program typically involves two categories of activities, risk assessment and risk management. The purpose of risk assessment is to characterize the potential health impacts of air toxics on people near emission sources, as well as evaluating the potential health impacts on the population. The purpose of risk management is to ele -- is to evaluate and implement control strategies to reduce exposure to air toxics.

Risk management can include the use of best available control technology or use formulation or process

changes. Facilities make these changes to meet their own needs or in response to regulatory requirements.

California continues to invest hundreds of millions of dollars per year in public incentives to replace diesel equipment or introduce zero emission technology. Risk assessment and risk management relate to each other, because risk assessment provides the potential health Impact information used in risk management decisions.

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AIR POLLUTION SPECIALIST HARRIS: As required by State law, OEHHA is charged with the responsibility of developing risk assessment guidance for use in assessing risk from air toxics. The OEHHA guidelines have been updated in a public- and peer-reviewed process. The last document, the OEHHA guidance manual, was finalized March 6th of 2015. These guidelines reflect new studies on childhood sensitivity to air toxics and new data on exposure for people of all ages. The impacts of these new guidelines mean that cancer risk estimates are likely to increase for most sources when compared to risk assessments using prior technology.

The changes may result in more facilities being subject to public notification and emission reduction requirements. The districts and ARB have been evaluating

the air toxics programs and policies to address these risk methodology changes.

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AIR POLLUTION SPECIALIST HARRIS: This slide provides an overview of the key factors in the new OEHHA guidance manual affecting inhalation cancer risk estimates. The net effect of the changes is an increase in the estimated inhalation cancer risk between 1.5 and 3 times, when compared to the previous risk estimates based on the old methodology.

This is the case even though there are no changes in emissions. As illustrated, some of the new changes will increase risk estimates and some will decrease risk estimates. Those factors that will increase risk estimates are lifted -- are listed on the left, and those refinements that may decrease risk estimates are listed on the right side of the slide.

On the left, age sensitivity factors address the increased sensitivity of children relative to adults. Daily breathing rates are an example of the new exposure information developed by OEHHA for people of all ages, spanning from the last trimester of pregnancy through age 70.

The right side, list refinements, such as the fraction of time at home and exposure duration that reduce

the amount of time a person is exposed, or spatial averaging, which may reduce the quantity a person si exposed to. The new methodology does not change cancer potency factors.

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AIR POLLUTION SPECIALIST HARRIS: The OEHHA guidance manual affects the programs listed in the graphic. The ARB and CAPCOA risk management guidance provides specific recommendations for districts on preventing stationary sources and for the Hot Spots Program. The hot spots program, created by Assembly Bill 2588 in 1987 establishes a multi-step program to create a toxics inventory, to identify higher risk facilities, to notify the nearby community of facility-specific risk results, and assess and implement actions to reduce risk at the facility.

The ARB work plan within the risk management guidance describes the way ARB will evaluate existing statewide measures under the Toxic Air Contaminant Identification and Control Program. In this program, State law directs ARB to use best available control technology in consideration of cost and potential health risk.

The risk management guidance does not provide specific recommendations for the CEQA process or

thresholds. CEQA will be addressed at the local district level.

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AIR POLLUTION SPECIALIST HARRIS: The risk management guidance includes a section that will assist with risk communication. It provides, in question and answer format some information that explains concepts and terms used in risk assessment and risk management. This information, coupled with CAPCOA's update of the public notification guidelines will be helpful for risk communication.

The risk management guidance also provides recommendations for districts to use while implementing the requirements for district permit programs and for the Hot Spots Program. In addition, there are recommendations for breathing rates used in risk assessments for risk management decisions.

The risk management guidance also contains a list of district activities and ARB's work plan for addressing the new risk assessment methodology for mobile and stationary sources of air toxics.

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AIR POLLUTION SPECIALIST HARRIS: We created the risk management guidance through a collaborative effort between ARB, CAPCOA and the districts. We held weekly

meeting over nine months. ARB and CAPCOA held two public workshops, one in Diamond Bar and the second in Sacramento during June on the draft version of the guidance.

Several thousand subscribers to seven ARB listservs were sent a notice for the release of the draft risk management guidance. At least 230 people viewed or attended the workshops via the web or in person, and both verbal and written comments were provided throughout the public process.

We also relied on a task force with industry and environmental representatives to discuss and provide input on the guidance. We met three times over the developmental time frame. ARB and CAPCOA also participated in private meetings when requested.

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AIR POLLUTION SPECIALIST HARRIS: California's 35 independent local air districts have the primary authority for permitting stationary sources that emit air pollutants. Each district has the authority to maintain individual policies, rules, or procedures. The guidance presented here is intended to assist districts that may decide to revise their threshold levels associated with the use of toxics best available control technology, also known as TBACT, or permit approvals.

The recommendations include that districts may

elect to establish TBACT -- a TBACT requirement at a cancer risk greater than one chance per million and/or a non-cancer hazard index greater than one. A Hazard index indicates the potential for non-cancer health effects.

Permits are approvable if the risk is below the district permitting risk thresholds. Recommended permitting risk thresholds are 10 to 25 chances per million for cancer risk, and a noncancer hazard index less than or equal to one.

The permitting guidance acknowledges that districts may elect to establish a single permit risk threshold for all sources or different permitting risk thresholds for certain sources or categories of sources, based on the criteria established by the district. There are no specific recommendations for permit denial level. Instead, permit denials are -- permit denial levels will set by the districts.

There may be situations where permit approval above or below the permitting risk threshold may be appropriate. Factors for permit approval above the permit levels could include, but are not limited to, the source uses TBACT; the source supports essential goods or essential public services as determined by the air pollution control officer or defined by the local district permitting policy, rules, or programs; or a significant

portion of the operation is due to readiness, testing, or emergency use, an example of this would be hospital generators; or there may be other district-specific considerations.

One ramification of the OEHHA methodology on permitting is that some equipment that could have gotten a permit in the past may not be able to get a permit in the future, or they may have to do additional things. Some of those things could include adding additional controls, changing processes or products used, or doing more extensive and refined modeling.

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AIR POLLUTION SPECIALIST HARRIS: This slide covers the recommendations for the major requirements of the Hot Spots Program. Prioritization is used by the districts to determine which facilities must submit a risk assessment. CAPCOA will be updating its prioritization guidelines to reflect the new methodology and the use of a newer air dispersion model.

Public notification is required if risk assessment results are above district-specified notification levels. When this happens, facilities follow the district procedures for public notification. CAPCOA will also be updating the public notification guidelines to address information used in notification.

CAPCOA will develop drafts and then discuss these documents at a workshop. Upon approval by CAPCOA, individual districts can utilize the recommendations to develop any changes in their individual programs.

A risk reduction audit and plan is required if risk assessment results are above the district specified threshold -- threshold levels risk reduction, audit, and plans. When this happens, a facility must develop and implement a plan that is approved by the district to reduce the risk below the threshold level within a specified time frame.

The risk management guidance does recommend that risk reduction, audit, and plan levels not exceed 100 chances per million for cancer risk or a hazard index of 10 for non-cancer.

For reference, the risk management guidance also includes a list of 2014 threshold levels the district used for prioritization, notification, and risk reduction audit and plans. AB 2588 impacts will depend on what the districts decide to do. However, it is likely that more facilities may have to complete public notifications and/or risk reduction, audit, and plans.

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AIR POLLUTION SPECIALIST HARRIS: The breathing rate policy in Appendix D of the risk management guidance

provides recommendations for inputs used in risk assessment. This policy uses new science on childhood sensitivity, and the new breathing rates. The policy recommends using a combination of breathing rates in cancer risk calculations to be protective of the most vulnerable.

Next slide.

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AIR POLLUTION SPECIALIST HARRIS: As CAPCOA and ARB pursue the activities listed in the next group of slides, we'll continue to work in an open public process with industry, the environmental community, and the public to determine the best way to protect public health in consideration of health risk and cost consistent with State law.

As previously mentioned, CAPCOA will be updating the prioritization and public notification guidelines over the next year. Individual districts are also evaluating their other programs, policies, and procedures to determine if changes need to be made, and districts will work with stakeholders throughout this process if changes are needed.

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AIR POLLUTION SPECIALIST HARRIS: ARB uses many tools to reduce public exposure and potential risks from

air toxics. California has a comprehensive air toxics program for addressing sources of air toxics. Since the 80s, ARB and the districts have established and implemented air toxic control measures, rules, policies, and procedures.

Through the toxic air contaminant, identification, and control program, the ARB has identified over 200 air toxics as toxic air contaminants. This led to OEHHA providing cancer and non-cancer health factors for use in risk assessments, and to the ARB's Development of control measures, ATCMs, that use the toxics best available control technology in consideration of cost and risks for sources emitting toxic air contaminants.

Districts implement these State ATCMs or their own versions of the measures. The district versions are at least equivalent or are more protective.

ARB also partnered with ports, railroads, and other industries on programs to reduce emissions of toxics from these operations. Familiar incentive programs, such as the Carl Moyer, or Proposition 1B, and the low-carbon transportation have been effective in accelerating the replacement of higher polluting vehicles.

Other very specialized incentive programs like the one for non-toxic dry cleaning alternatives help other

businesses to make similar transitions to cleaner operations. Enforcement, education, and outreach activities by the ARB and districts are also valuable tools to reduce potential health risks from air toxics.

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AIR POLLUTION SPECIALIST HARRIS: ARB staff has developed a multi-year work plan to review -- to review and update, where necessary, our policies and regulations. We will use our customary process consultation and public workshops on any changes. Key elements of the plan include: Release of the Hotspots Analysis and Reporting Programs software concurrent with the OEHHA guidance manual. This was coordinated to place risk guidance and the tool to implement it on the streets simultaneously.

Update of the existing ARB guidance to the districts for toxics permitting, hot spots, and inhalation risk assessments is the next item. This was -- is presented in the document today as a joint effort with CAPCOA.

In 2016, staff will recommend updates to the hot spots fee rule and the emission inventory, criteria, and guidelines for Board consideration.

Also, in 2016, we will work with CAPCOA to develop industry-wide guidelines for sources that support essential goods and essential public services where their

emissions may result in cancer risk estimates above district thresholds. Examples of these types of sources include gasoline dispensing facilities or emergency standby diesel engines.

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AIR POLLUTION SPECIALIST HARRIS: Over the course of the -- over the course of two years, ARB staff will be assessing the statewide control program to reduce the health risk from air toxics. We will review the existing control measures in two steps to identify any that may need to be updated. Initially, ARB anticipates focusing on the ATCMs with risk-based provisions to ensure they remain health protective.

In addition, ARB will be developing further controls and incentives to move more sources to zero and near-zero emission technology. This will be done through the public process on the sustainable freight strategy and the State implementation plan.

The Governor's new 2030 climate targets and recent State legislation are driving additional planning efforts that will also emphasize zero emission solutions with co-benefits for air toxics.

In 2016, ARB expects to make very focused updates on the land use handbook.

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AIR POLLUTION SPECIALIST HARRIS: This slide summarizes the time frames and major milestones in the first three years of ARB's workplan. It summarizes the guidelines and tools that have or will be developed. It includes three statewide planning efforts. It also lists the first ATCMs we will be reevaluating and other regulations we will bring to the Board. These include amendments on the chrome ATCM to harmonize with federal requirements, as well as changes to the portable equipment rule to align the near-term fleet requirements with the engines available.

Both of these rule-making processes will provide opportunity to look at what more could be done to achieve additional benefits.

We plan to develop a report that documents our review of existing ATCMs and return to the Board in 2017 with staff recommendations on next steps.

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AIR POLLUTION SPECIALIST HARRIS: This slide summarizes the major areas of comments and discussion in response to the initial draft document. I am pleased to report that we were able to include additional text in this version of the guidance that responds to most of the stakeholder's recommendations.

Business interests urged us to expand the risk

communication discussion in the document, so that they can draw upon official air agency materials in their communications. We did so.

Environmental and community advocates asked us to emphasize that the State response to the new risk assessment methodology should be to increase, not merely maintain, the existing levels of health protection. The joint ARB and CAPCOA recommendations in this document will accomplish this shared objective. Multiple stakeholders urged CAPCOA to commit to update the hot spots prioritization and public notification procedures in a public process. CAPCOA has done so.

One stakeholder recommended that we significantly expand the discussion and recognition of California's progress in reducing diesel pollution. The Board, U.S. EPA, the districts, the engine manufacturers and the California fleets can be proud of the State's accomplishments in this area. We did not go as far as this comment urged, because diesel particulate matter is still responsible for approximately 60 percent of the excess cancer risk from air toxics in California.

Therefore, we have more work left to do, especially in light of the new information on increased sensitivity of children.

Finally, multiple stakeholders encouraged ARB and

CAPCOA to continue engaging stakeholders in the development of all the subsequent proposals and documents, and we are committed to doing so.

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AIR POLLUTION SPECIALIST HARRIS: In conclusion, ARB staff recommends that the Board approve the joint Air Resources Board and California Air Pollution Control Officers Association risk management guidance for stationary sources of air toxics, and that we continue to partner and engage with the districts, CAPCOA, and stakeholders on action items in the ARB and district workplans.

I want to thank you for your attention. This concludes ARB's presentation.

Alan Abbs, the new executive director of the California Air Pollution Control Officers Association will now make a statement on behalf of CAPCOA.

Alan.

CAPCOA EXECUTIVE DIRECTOR ABBS: Thank you, Greg, and thank you, Chair Nichols and members of the Board. As Greg has mentioned numerous times we he's given presentations like this, this has been a great working process between ARB staff and the local air districts and CAPCOA. And specifically on the Air Resources Board side, I'd like to acknowledge Cynthia Marvin also Robert

Krieger, Greg and Dan Donohoue as well who did a lot of the initial work before he retired.

On the air district side, we couldn't have gotten this done without the expertise from Jill Whynot from the South Coast. And then as part of our work group, we also had representation from all the large air districts plus most of the medium-sized air districts, and a few of the small and rural air districts.

And so it was a great working process. As Greg mentioned, it lasted well over nine months. And I think we have a really good document that provides a much needed update from the original document in the early 1990s.

As Greg also noted, CAPCOA is committed to updating the prioritization guidelines and also the public notification guidelines. And we started a process to do that and to make it a public process, so that we can get stakeholder input before we bring forward a final document.

And lastly, I'd like to say that even though the Board hasn't weighed in on this document yet, the air districts are already moving forward with reviewing their current risk management at the local district level. Some of them are making changes to their risk management programs, or they've briefed their boards. And so we've already started the process to make changes to our

programs to be more health protective here in California.

So with that, I will turn it back to staff.

CHAIR NICHOLS: Thank you.

Did you wish to call on either Dr. Marty or Ms. Whynot at this point or shall we just go straight to the witnesses?

TRANSPORTATION AND TOXICS DIVISION CHIEF MARVIN:

No, we'd recommend you go straight to the witnesses. They are up here to provide reinforcements and help us respond to any questions.

(Laughter.)

2.4

CHAIR NICHOLS: They add a lot to the -TRANSPORTATION AND TOXICS DIVISION CHIEF MARVIN:
Yes, ma'am.

CHAIR NICHOLS: -- diversity and the quality of the presentation. So thanks for being here.

Okay. Let's begin then with Mr. Lusk.

MR. LUSK: Thank you, Chair Nichols and members of the Board. My name is David Lusk, and I'm a Senior Air Quality Engineer with the Butte County Air Quality Management District. I'm here on behalf of my agency and APCO to speak in support of the proposed guidance before you today.

As a staff member participating on the work team with ARB and CAPCOA members, I wish to commend ARB staff

on their efforts to work with districts through CAPCOA to garner our input and ensure our concerns were vetted, and for writing and assembling the document. We believe the guidance provides the necessary framework to help districts evaluate and amend their toxic programs to implement the new OEHHA methodologies to further protect public health while balancing the needs of the community and regulated sources.

Thank you for this opportunity to address you in favor of adopting the proposed guidance.

CHAIR NICHOLS: Thank you. Mr. VanMullem.

MR. VanMULLEM: Madam Chair, members of the Board, my CAPCOA colleagues, my name is Dave VanMullem and I am the air pollution control officer for Santa Barbara County APCD. I am here to comment on the proposed risk management guidance for stationary sources of air toxics.

First, I would like to compliment the ARB and CAPCOA on their considerable efforts in preparing this document. We believe that it will greatly benefit our management efforts towards air toxics throughout our State.

However, I am here today because I feel compelled to comment on one of the key objectives guiding its development. Specifically, we strongly disagree with key objective number 4 on page 10, which states, "Ensure that

future program changes will not result in health protective program requirements relative to rules or programs in place prior to the 2015 OEHHA manual".

We are concerned that this guiding objective could be interpreted in such a way as to undermine the goals of the Children's Environmental Health Protection Act SB 25.

SB 25 and the 2015 OEHHA manual were adopted to ensure our infants and our children are adequately protected from toxics air pollution. A key objective for states that air toxic programs only need to be as health protective as they were before the OEHHA manual was published. In other words, it would be permissible to maintain an air toxics program as is without addressing the significant updated science as mandated under SB 25.

Also, I'd like to bring to your attention that health risks before the new manual came into effect were grossly underestimated the risks to our children, our grandchildren, and those generations to come.

In summary, key objective 4 neither ensures that the new science will be implemented, nor does it ensure the health protection of our youngest, most susceptible population. This language is in conflict with the legislation our agencies are mandated to implement. Therefore, we respectfully ask the key objective be

removed in its entirely -- entirety and altered to simply read, "Ensure that the 2015 OEHHA manual is fully implemented".

Thank you.

CHAIR NICHOLS: Thank you.

BOARD MEMBER BALMES: Madam Chair?

CHAIR NICHOLS: Yes, Dr. Balmes.

BOARD MEMBER BALMES: Could we get staff to respond to that specifically at this point or do you want to wait?

CHAIR NICHOLS: Yes, sure. Absolutely.

TRANSPORTATION AND TOXICS DIVISION CHIEF MARVIN:

Thank you, Dr. Balmes. We appreciate that opportunity. So I want to be clear that Santa Barbara, all of CAPCOA, and all of ARB staff have the same general view of this, which is the new health science is important in signaling what we need to do. That was the driver behind the development of all of the provisions in this guidance. The number one objective, as stated in that same section, is to increase overall public health protection. So there's no disagreement about that.

What you heard was one of 35 air districts that has a different view about one sentence in the entire guidance document. And with all respect to Mr. VanMullem, he stated that it meant that district -- it was okay for

districts to do no more than they do today.

From our perspective, what the words say is that we're asking districts to ensure that the future program changes don't backslide. That's essentially what that piece is. And so what we've suggested in the guidance that -- is that we're bracketing it. No district should weaken its existing program. That seems like a no-brainer. We concur on that. But the objective, the number one objective, is to strengthen that public health protection.

So we felt it was important to have that back -- no backsliding language in here, we worked very carefully with CAPCOA to craft the words on the no backsliding.

These were the words that we ended up with for clarity sake.

not objectives for the program going forward. These were the objectives that we had agreed on with CAPCOA and discussed with the task force up front that were to guide and inform the development of the specific provisions that are before you on the guidance for permitting for hot spots and for inhalation risk assessments.

CHAIR NICHOLS: I understand your answer, but I feel there's something that perhaps you're not saying, which I need to probe a little bit more, which is why

would anyone think there would be any backsliding? I mean, what's the need for the sentence at all? There's nothing about the OEHHA new risk assessment that suggests that anyone would be able to backslide that I'm aware of.

TRANSPORTATION AND TOXICS DIVISION CHIEF MARVIN:

Well, remember the OEHHA guidance describes how we assess risk. It doesn't describe or direct what you do with that. And as we were entering into discussions with the districts about the changes that they were considering to their programs, I will just say that there was a universe of different opinions about how districts might respond to this. And they did vary from one end of the spectrum to the other. I'd prefer not to be more specific than that.

CHAIR NICHOLS: I'm not asking you to name names.

TRANSPORTATION AND TOXICS DIVISION CHIEF MARVIN:

We felt it was important to have this.

CHAIR NICHOLS: When one area feels strongly enough about this and one that is known, I would say for being on the progressive end of the spectrum when it comes to pollution control programs. It's just a cause for concern.

So any other questions or comments on that particular point at this stage? Maybe we can talk about it as we move forward.

Let's hear from the rest of the witnesses though.

Larry Greene from Sacramento.

MR. GREENE: Madam Chair, I'm Larry Greene. The air pollution control officer at Sac Metro Air Quality

Management District. To speak to that issue a bit, just for a second.

Obviously, this is a negotiated list, and we worked very hard on this. I would say that my colleague has been very passionate in his interest to protect public health. We all have. And we, in considering his comments, which caused us -- he's caused us to think, just like you, about this a lot. And we feel like the list that's there is the appropriate one, but we also have thought and think and agree with him that this program is not backsliding. It's moving forward. And I think the first line there, the first paragraph states that clearly.

And I did want to, in my comments, commend the Air Resources Board, and everyone here, that has worked on this program. In my short time, as an air pollution control officer, I have seen a lot of interactions between the Air Resources Board and the districts. This to my mind is one of the best examples of work that we've done jointly.

This was not an easy effort. When we saw what was going to happen as these new guidelines came out, we

knew that overlaying those on a program that had been in place 20 years was going to be difficult. We knew the objective was to clearly recognize the public health changes and to implement those over time, but we needed to figure out how we could do that in a context that didn't disrupt essential businesses, hospitals, and many other pieces of the district programs.

However, the ultimate goal is to get to a better place. And you've seen the work plan there. It's a very rigorous work plan, and we will continue to be engaged together over the next several years in working to implement those. The districts have major roles in some of those, and in others it's the State Air Resources Board staff that's doing that.

So I ask you to approve this. I think it's a good program, and I know for my fellow districts that we will work very hard individually. And we have to, because each of us will have to adopt rules at our own local level that implement this. And I will be in front of my board here over the next several months discussing how we will implement this. And then we will be engaged over time in all the other pieces that you saw in the work plan. So thank you very much, and again thanks to everyone who's worked on this program.

CHAIR NICHOLS: Thanks, Mr. Greene.

Bill Magavern

MR. MAGAVERN: Good morning, Madam Chair, Madam Vice Chair, and Board members, both modelers and others.

(Laughter.)

MR. MAGAVERN: I'm Bill Magavern with the Coalition for Clean Air. I participated in the three workshops -- excuse me, the three task force meetings and also the workshop that was held here in Sacramento. And we at Coalition for Clean Air have a lot of respect for the scientific work that's done by OEHHA and think that it's vital that we do update our air toxics risk management practices according to the best science that's available.

And so I think it's really critical that we focus on the finding here, because what we are now being told by the scientists is that our residents, especially our children, are more at risk from air toxics than we had known before. And so that's, you know, what fundamentally matters to the people that are breathing these toxins, and is why we think that objective number 1 really is the crucial one. That we address the new health science by increasing overall public health protection.

So we urge you going forward to continue to make that the number one objective and to do everything possible to reduce the incidences of illness and premature

death that our people are subjected to by air toxics. We particularly support the recommended actions to update the air toxic control measures, to update the land use handbook, and, of course, as the Chair has pointed out, that most of the risk from air toxics is coming from diesel exhaust. And about half of that is coming from freight, which of course brings us back again to the importance of the sustainable freight strategy.

And I want to congratulate the Board and the staff on the Executive Order on freight that Governor Brown issued on Friday, which is going to help bring all the agencies together, and continued to move forward the very important work that you're doing on freight.

When it comes to risk communication, I think it is vital that we give people clear information that they can understand and to convey this new scientific information that we have.

So appreciate the time that you're giving to this, and the cooperation between the Board and the air districts as well as the non-governmental interests involved.

Thank you.

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CHAIR NICHOLS: Thanks.

Ms. Barrera.

MS. BARRERA: Good morning, Chair Nichols and

members of the Board. I'm Jennifer Barrera on behalf of the California Chamber of Commerce, a policy advocate. You may be more familiar with my colleague Anthony Sampson who has been working directly on this issue, and helping develop the proposed risk management guidance for stationary sources of air toxics.

Unfortunately, Anthony is unavailable to attend today's meeting and so he has asked that I deliver the following remarks on his behalf:

We are here today representing a collation of more than 100 organizations representing business, labor, health care, agriculture, local government, and other organizations who have participated in workshops at the State and local level, provided formal comment letters, and otherwise provided feedback on the discussion of these guidelines.

We want to start by thanking you, CAPCOA, staff, OEHHA, for your diligence on this matter and for taking into consideration the concerns of the business community and regulated entities. We're happy to see that some of our concerns have been addressed in the version being discussed today.

Under the proposed changes in air toxics risk assessment methodology, facility risk estimates will be one and a half to three times higher relative to estimates

using current methodology, even though there has not been any increase in actual facility or -- excuse me facility emissions.

The revised guidance shows a marked improvement in explaining the policy choices that drive increases in facility risk estimates. And it provides useful context for understanding risk estimates relative to background health risks.

However, we are still concerned that these guidelines do not provide enough utility for local air districts, when faced with critical decisions, such as issuing a permit to a facility that exceeds local thresholds when extenuating circumstances exist.

These concerns aside, the coalition feels that the most important changes made to the proposed risk management guidelines is CAPCOA's willingness to open the door to stakeholders in updating the 1992 public notification guidelines.

Messaging and notification templates established under the old guidelines could lead to unnecessary public alarm, as many individuals will be receiving these notices for the first time. The coalition recommends updating the public notifications to more user-friendly question-and-answer format.

We also urge the Board to include the following

messages in any risk communication letters, where applicable:

Higher risk estimates are the result of recent changes in how air toxic risks are estimated, not actual increases in toxic emissions. Air toxic emissions have decreased dramatically over the past 30 years due to State and local regulatory programs and improvements in air toxics emission control technology.

Risk estimates are not a bright line between safety and danger. Facility health risk estimates are small relative to background health risk.

Thanks to the work of the Board and local pollution control districts, we have greatly reduced air emissions in California by approximately 75 percent.

Thank you for being able to provide these comments.

CHAIR NICHOLS: Thank you. These are helpful comments. And the letter, I know, did lead to some changes in the actual guidelines. And I think your additional comments about communication are worth further consideration. So, thanks.

Hi, Mr. Skvarla.

MR. SKVARLA: Hi. Mikhael Skvarla with the Gualco Group here on behalf of the California Council for Environmental and Economic Balance.

We'd like to take a moment just to recognize the efforts of staff and -- at the ARB and with CAPCOA for all their efforts on this. We appreciate the process. It -- with the changes in the science, there was a lot of alarm and a lot of concern.

ARB was diligent, along with the CAPCOA staff, to make sure that all stakeholders were at the table and that the process went smoothly to get to this point. So we just wanted to take a moment to recognize staff and thank them and the Air Resources Board for moving forward on this.

CHAIR NICHOLS: Thank you very much.

I think that concludes our list of witnesses.

And we have a resolution of approval in front of us. I appreciate the fact, and I'm happy to know, that the districts are not waiting around for ARB to approve this document before going out and making changes. I think that's a positive sign.

And in reality, I feel that our action today is a bit of a request for a rubber stamp, to be honest with you. I don't mean that necessarily in a bad way, because a great deal of work went into this by expert staff. And they listened to stakeholders. And has been suggested several times, what they've come up with is a negotiated document.

So while I could see some ways in which I would personally like to edit it a little bit, I realized that's not really what's being called for here. But I do want to express my view that we're not finished yet with the process of improving the way we communicate about toxic risks. And so I'm going to turn to Dr. Balmes who's going to explain how this is all going to happen.

(Laughter.)

CHAIR NICHOLS: Or maybe not.

(Laughter.)

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BOARD MEMBER BALMES: First off, it was really music to my ears to hear one of the district representatives say, you know, how well the process worked with staff. I think, you know, we're at our best when staff and CAPCOA are in agreement after a lot of work to get there. So again, that -- I want to praise that really good joint effort, because I know this isn't that easy to translate these guidance documents.

I also want to thank Dr. Marty representing OEHHA, which is a -- which provided the initial guidance document that I know a lot of work went into that. And I don't know if the -- my fellow Board members appreciate the reason why breathing rates are important here.

BOARD MEMBER SERNA: Rates are important here. I do recognize that.

(Laughter.)

BOARD MEMBER BALMES: Kids breathe a lot faster relative to their weight -- their body weight than oldsters like us, so they actually get a greater effective dose.

So I think it's great that we are -- we came up with guidance -- a guidance document that reflects the increased knowledge with regard to susceptibility. And I really appreciate that CAPCOA is in support of this. And I want to also thank Mr. VanMullem for being opposed because he wants it to be more definitively precautionary in its approach. But I felt that Cynthia Marvin's response reassured me that this language has been negotiated, and -- you know, I'm not trying to tweak it, but I appreciate that Santa Barbara wants to -- wants to make sure that we go forward as opposed to backsliding.

And I think it's important for me to highlight the fact that we're focusing on air toxics here, because as we improve air quality with regard to the criteria pollutants -- everybody knows that lingo, you know, ozone, PM2.5, and NO2, the ones that we have nationally ambient air quality standards from the U.S. EPA that we have to respond to and implement, air toxics, I think, are more important with regard to health outcomes.

So I applaud the focus on air toxics here. And

I'm also pleased, as Mr. Magavern brought up, that, you know, one of the main approaches to reducing air toxic exposure is a clean freight strategy. And so I'm also pleased that Cynthia Marvin's purview includes both these air toxic hot spots, if you will, and our clean freight strategy.

with regard to the Chamber's request about not being overalarmist with regard to the public messaging about this. I think hazard communications is difficult, as the Chair suggested. And I certainly don't consider myself an expert with regard to hazard communication. But over the many years that I've been involved with environmental health and trying to communicate to the public, I think the last thing we need is to be overalarmist here, when, in fact, we're just aligning the science with the risk assessment approaches that districts have to do, as opposed to saying there's some big new problem.

We have a problem still that we're trying to address with regard to air toxic exposures, but it's not suddenly worse. And as a matter of fact, I would say for the messaging that slide two is a perfect slide to be part of that messaging, where it shows that despite population growth, vehicle growth, and economic growth, there's been a reduction in emissions.

That's a tribute to what the districts have done and what the Board has helped guide them to do. So that would be an important part of the messaging for me.

CHAIR NICHOLS: Thank you, Dr. Balmes.

Ms. Riordan.

BOARD MEMBER RIORDAN: Yes. Thank you. I want to congratulate all of you on what appears to be a very good, cooperative effort. And very specifically, my thanks to CAPCOA, or whomever made the decision, to include not only the large districts, but the mid-sized and smaller districts. I think that gives me some comfort coming from, you know, albeit a smaller district, that I can go back to them and say, we all participated in this process. And so I'm hopeful you can continue to keep the collaborative effort together of all types of districts.

And then to the final point, which is the notification or the messaging that we work with. I am hopeful that we will continue to work on that, so that we don't unduly alarm people. You can say things in many ways. And some of them elicit unfortunately some responses that are not necessarily good. And you then have to put out a lot of fires before you actually get to the realization of what we're trying to do.

So if we should continue to work on that, I think that would be an excellent effort. But I do congratulate

all of you.

CHAIR NICHOLS: Mr. Gioia.

BOARD MEMBER GIOIA: The other aspect I wanted to raise, because I think communication is important is sort of relative risk, because we don't do the best job communicating to the lay public about what risk means, so if we have a risk level in isolation. So I'd like us to think about how we put this in relation to whatever the most appropriate standards would be in comparing to something that's meaningful on relative risk. Do you have thoughts or have you --

CAPCOA EXECUTIVE DIRECTOR ABBS: Yes, sir. I think you've hit the nail on the head, as well as the other Board members. Risk communication, as we've found throughout this process, has probably been the most difficult thing to wrap our hands around, as you can see, even with the key objectives that formed the basis of this document that we talked about a year ago, nine months ago. When we were first given this task and we started thinking about the OEHHA risk assessment changes, and how we were going to merge that into a guidance document, we -- even at that time, as Cynthia alluded to, a lot of districts had different ideas from the outset about what that would mean in terms of their own risk management guidelines.

And a lot of that was because we weren't very

sophisticated about risk communication, because it was something that we hadn't thought about for a long time. And so I think this process, for one, has really raised the issue to us that risk communication is difficult, and it's something that we have to work on.

Depending on who you're talking to about the risks of a facility, they have different expectations about the type of information they want to get. They have different expectations about what risk is. They have different expectations about whether a facility has done a lot of work to reduce risk in the past or, you know, how much they can really do in the future to reduce risk.

And all that is going to end up informing this future CAPCOA risk notification document. And, at the same time our last document is over 20 years old, the communication strategies that we identified back then are obviously old and outdated, and so we have to think about new ways to not only communicate risk, but to communicate, period.

And so it will -- this -- it sounds like it will be a lot more challenging project than we initially thought it would.

BOARD MEMBER BALMES: If I can chime in, just a second?

CHAIR NICHOLS: Yes.

BOARD MEMBER BALMES: If you would like a physician who has some experience in the concept of relative risk to review what you come up with, I'd volunteer to do so.

CAPCOA EXECUTIVE DIRECTOR ABBS: I appreciate that, and I think we'll take you up on that offer. Thank you.

(Laughter.)

CHAIR NICHOLS: I think you're hereby designated as OEHHA liaison from the Board to this effort. And I really appreciate the fact that there's been a huge amount of progress clearly in reflecting the new science in this document. No reason not to move forward with using it. But at the same time, I think we do all recognize that there's some additional ways in which we can communicate with the public about what this all means. That would be helpful to everyone.

So with that -- yes.

BOARD MEMBER SHERRIFFS: It's been great that there's been all this collaborative non-toxic discussion between staff and CAPCOA and industry and so on.

(Laughter.)

BOARD MEMBER SHERRIFFS: And I think the discussion that's been pointed out, brought up by Dave VanMullem, it's good that we've had this discussion to

reemphasize what we mean here because words can be confusing. And I think it's important that the Board has had this discussion and reemphasized, yes, this all follows from -- everything is intended to increase overall public health protection, and that business as usual would not be doing that. So it's been good. I want to reemphasize that.

CHAIR NICHOLS: And is that a motion to approve?

BOARD MEMBER SHERRIFFS: And a motion to approve.

CHAIR NICHOLS: Thank you.

VICE CHAIR BERG: Second.

CHAIR NICHOLS: And we have a second as well.

All right. All in favor, please say aye?

(Unanimous aye vote.)

CHAIR NICHOLS: Any opposed?

Any abstentions?

Very good. Thank you. This has been a very useful discussion.

We have one more item this morning. Also a very important and interesting item. This is an information item providing an initial assessment of EPA's recently announced phase 2 greenhouse gas standards for heavy-duty trucks. It flows nicely from our last discussion about what the greatest source of health risks is, as far as Californians are concerned.

And I want to say that that's our last item.

We'll take a brief public comment, and then break for an executive session, which we have scheduled for the noon hour.

So without too much further ado, as the staff is assembling, why don't I just make a couple additional comments.

In 2011, U.S. EPA and National Highway Traffic Safety Administration jointly adopted the first ever national greenhouse gas emissions and fuel economy standards for medium- and heavy-duty engines and vehicles, which they called phase 1 greenhouse gas standards, recognizing that there would be obviously another phase.

On July 13 of this year, U.S. EPA published its notice of proposed rule-making for the follow up to these phase 1 standards, known as phase 2. This agenda item will provide the Board with a preview of the proposed federal phase 2 greenhouse gas program, and staff's initial assessment of the proposal.

I think it's important in this conversation that we recognize that there are very important benefits that this measure will provide in reducing greenhouse gas emissions, and that we welcome EPA's initiative in moving forward. At the same time, we also have to make it clear that we have continuing and significant concerns regarding

emissions of oxides of nitrogen from heavy-duty trucks, so that as EPA is working to finalize their proposal, we have to continue to reinforce to them the importance of further reducing NOx emissions, as well as to signal the need for them to move quickly towards developing lower national NOx standards for heavy-duty trucks, as soon as their work on these phase 2 standards is complete.

We will be participating in their process. And at times, I think we will be taking positions that are clearly at the -- in the direction of pushing for a stronger outcome than what might be expected, if you went with sort of the lowest common denominator approach of one of the alternatives that is in front of them. That's a role that California frequently places, of course. But I think in this instance, it's even more apparent than it may have been in some other cases, that while we're working together to assess and evaluate and share data, and collaborate, that California needs to maintain its vigilance, and to be prepared to act as necessary to make sure that we're getting the reductions that we need from this very, very important source.

So with that, this is an informational item only, so we're not going to be making any decisions, but I know the Board is going to be keenly interested in this discussion, and be wanting to both ask questions and

provide guidance to staff. And so without further ado, will ask Mr. Corey to add any additional remarks.

EXECUTIVE OFFICER COREY: Yes. Thank you, Chair.

ARB staff, as indicated, coordinated closely with U.S. EPA in the National Highway Traffic Safety Administration staff as the federal agency's developed the phase 2 proposal over the last several years. Now that the notice of proposed rule-making for the phase 2 greenhouse gas standards has been published, a 60-day public comment period has begun, which ends in September 11th of this year.

ARB staff is currently in the process of reviewing the 2,000 plus page phase 2 regulatory proposal. When our review is complete, we'll submit comprehensive comments to U.S. EPA's public docket. And as you'll here, our initial assessment is that while the proposal is not as stringent as we would have liked, it's a crucial next step towards meeting our greenhouse gas reduction goals. We intend to work with stakeholders and the federal agencies to provide comments to strengthen the proposal before it's finalized next year.

Inder Atwal of the Mobile Source Control Division will provide a description of the phase 2 proposal, highlight some of the areas of the proposal that we believe need to be strengthened, and discuss our planned

next steps.

With that, Inder.

(Thereupon an overhead presentation was

4 Presented as follows.)

AIR POLLUTION SPECIALIST ATWAL: Thank you, Mr. Corey and good morning Chair Nichols, Vice Chair Berg, and members of the Board. Today's update provides a summary of the proposed federal phase 2 greenhouse gas and fuel efficiency standards for medium- and heavy-duty engines, and vehicles that ARB staff's initial assessment of the proposal.

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standards are the second phase of federal heavy-duty greenhouse gas standards and build upon the phase 1 standards, which took effect last year and which extend through model year 2019. The phase 2 standards will accelerate the use of currently available technologies. On a national basis they will save over 77 billion gallons of fuel, improve mileage, particularly for long-haul tractor-trailers and cut CO2 emissions by over one billion metric tons, helping stabilize the climate and reducing our reliance on foreign oil. The phase 2 program will represent the most comprehensive medium— and heavy-duty truck greenhouse gas and fuel economy program in the

world.

According to the Union of Concerned Scientists, nationally phase 1 and 2 combined are expected to reduce GHG emissions by nearly 40 percent, compared to a phase -- to a 2010 baseline. We estimate that in California, phase 1 and 2 will cut CO2 by 31 percent, which is somewhat lower than the national reductions due to the gains we have already achieved with California's existing tractor-trailer regulations, and California's more modern heavy-duty fleet mix.

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AIR POLLUTION SPECIALIST ATWAL: Although the phase 2 proposal is an important step forward and will achieve critical GHG remission emission reductions for California, the proposal does include some missed opportunities. The federal proposal only modestly includes advanced technology, such as battery electric, hybrid and fuel cell vehicles, which will be crucial in achieving ARB's long-term criteria pollute and greenhouse gas goals. And bring ARB's sustainable freight strategy to fruition.

The proposal also fails to address aerodynamic improvements for vocational vehicles, and many types of trailers. In addition, as proposed, because they would increase the use of uncontrolled auxiliary power units, or

APUs, the phase 2 standards would cause a greater than 10 percent increase in toxic diesel particular matter emissions for medium- and heavy-duty trucks nationwide.

Finally, the proposal fails to mention plans for lower mandatory NOx standards for heavy-duty trucks.

Although the proposal focuses on reducing GHG emissions, lower NOx standards are also crucial for California and other states with ozone noncompliance issues.

Staff believes U.S. EPA should include a discussion on the need for a newer lower federal NOx standard for the same trucks covered by GHG requirements.

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AIR POLLUTION SPECIALIST ATWAL: Today, I will provide some background information on medium- and heavy-duty trucks, and the current GHG standards. Next, I will give an overview of the federal phase 2 proposal. Then I'll present staff's initial assessment of the federal proposal. Finally, I'll discuss our recommendations for ARB's next steps.

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AIR POLLUTION SPECIALIST ATWAL: Addressing medium- and heavy-duty truck emissions is essential. Such trucks account for 1/5th of the GHG emissions from the transportation sector nationally, and represent the fastest growing segment of emissions in the transportation

sector in both the U.S. and worldwide.

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AIR POLLUTION SPECIALIST ATWAL: In California, medium- and heavy-duty trucks over 8,500 pounds are responsible for a third of the State's total NOx emissions, and over a quarter of the diesel particulate matter. Similar to their contribution on a national basis, they also emit a fifth of the total greenhouse gas emissions associated with transportation sources, which is about eight percent of the statewide total.

That's why getting the phase 2 standards right is so important. Without controlling this significant source adequately, we will be significantly challenged in our meeting -- meeting our petroleum reduction and greenhouse gas goals.

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AIR POLLUTION SPECIALIST ATWAL: In 2011, U.S. EPA and NHTSA adopted the first national GHG and fuel economy standards for heavy-duty trucks, the phase 1 standards, which relied on today's currently available off-the-shelf technologies. While not technology forcing, the phase 1 rule-making is projected to achieve significant reductions. As an example for line-haul sleeper trucks, their GHG emissions are expected to be reduced by over 20 percent.

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AIR POLLUTION SPECIALIST ATWAL: The phase 1 medium- and heavy-duty standards cover three categories of vehicles, as shown here, line-haul tractors, vocational vehicles, which include utility trucks, box trucks, and garbage gauge trucks, and large pickups and vans.

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AIR POLLUTION SPECIALIST ATWAL: In 2013, ARB harmonized with the federal phase 1 program. Specifically, this harmonization included making our existing tractor-trailer greenhouse gas regulation, which is AB 32 early action item, consistent with the federal program.

ARB's adoption of phase 1 standards gave manufacturers the ability to produce California certified engines, and gave ARB the authority to enforce the regulatory requirements. Phase 1 is expected to reduce CO2 emissions in California by about 12 percent in 2013.

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AIR POLLUTION SPECIALIST ATWAL: I will now move on to discuss the federal phase 2 proposal in more detail.

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AIR POLLUTION SPECIALIST ATWAL: ARB coordinated closely with U.S. EPA NHTSA during development of the phase 2 standards. ARB staff met weekly with federal

agency teams for nearly two years and jointly met with manufacturers. In addition, ARB commissioned aerodynamic testing for vocational vehicles and small box-type trailers called pups. Our testing showed that up to an eight percent fuel consumption improvement is achievable using aerodynamic devices on some vocational vehicles.

U.S. EPA and intended to support specific elements of the proposal. One submittal outlined procedures to be followed to ensure that hybrids used to comply with phase 2 do not inadvertently increase NOx emissions.

In another letter, we recognize the solar reflective glazing of windows can reduce the need for air conditioning and fuel use, and recommend that a methodology for quantifying such credits.

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AIR POLLUTION SPECIALIST ATWAL: A notice of proposed rule-making, or NPRM, is the mechanism by which the federal agencies introduce a new rule. On June 19th, 2015, U.S. EPA posted at pre-publication version of the NPRM on the website. A final version of the NPRM was published on July 13th, triggering a 60-day comment period.

Today's presentation is staff's initial assessment of the proposal. Currently, staff from ARB's

various divisions are conducting an in-depth review of the NPRM. When that review is complete we will submit a comment letter into the federal docket.

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AIR POLLUTION SPECIALIST ATWAL: The NPRM builds on the phase 1 structure regulating line-haul, vocational, and large vans and pickups. Phase 2 newly introduces trailer requirements and adds provisions that require engine and transmission integration. The phase 2 standards are more ambitious, and longer term than those of phase 1, and will require more than just today's off-the-shelf technologies to comply.

The requirements begin with model year 2018 for trailers, and model year 2021 for engines and vehicles. The U.S. EPA and NHTSA's proposal would phase-in through the 2027 model year. The federal agencies are soliciting comments on an alternative that would accelerate the phase-in by three years.

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AIR POLLUTION SPECIALIST ATWAL: This table shows the projected fuel efficiency improvement percentages for each of the categories listed. Anticipated reductions from the phase 2 proposal range from three to eight percent for trailers, and 18 to 24 percent for the largest contributor to emissions, line-haul tractors. These

reductions are above and beyond the benefits already expected from the phase 1 program.

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AIR POLLUTION SPECIALIST ATWAL: Like phase 1, the proposed phase 2 standards would also have separate engine standards, in addition to the tractor and vocational vehicle standards. Staff supports the inclusion of a separate engine standard. These proposed engine standards are expected to achieve a four percent fuel efficiency improvement beyond what phase 1 required.

To meet the proposed engine standards, manufacturers are expected to employ the use of waste heat recovery, reduce parasitic losses, improve air flow handling, as well as other efficiency improving technologies.

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AIR POLLUTION SPECIALIST ATWAL: The phase 2 proposal would reduce CO₂ by 18 to 24 percent beyond phase 1, for line-haul tractors, the biggest contributor to GHG emissions of all the heavy-duty truck sectors.

This reduction includes the expected benefits from the separate engine stands. To meet the proposed tractor standards, manufacturers are expected to employ aerodynamic improvements, engine, transmission, and driveline improvements, use of lower rolling resistance

tires, and idle reduction technologies.

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AIR POLLUTION SPECIALIST ATWAL: Phase 2 would regulate trailers for the first time on national level, building on the success of ARB's tractor-trailer GHG regulation and EPA's Smartway Program.

Trailers come in a variety of types and sizes.

Phase 2 would require the use aerodynamic devices on long-haul -- long and short box type trailers only.

Additionally, these trailers would require the use of low rolling resistance tires and automatic tire inflation systems. The fuel efficiency improvement from box-type trailers is projected to range from seven to eight percent.

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AIR POLLUTION SPECIALIST ATWAL: In addition, to box-type trailers, the proposal would require the use of low rolling resistance tires and automatic tire inflation systems on non-box trailers. The use of aerodynamic devices would not be required from non-box trailers. The expected fuel efficiency improvement from non-box trailers is between three and four percent, around half the benefit expected for box trailers.

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AIR POLLUTION SPECIALIST ATWAL: The proposal

would reduce CO2 emissions for vocational vehicles by 12 to 16 percent beyond phase 1. Vocational vehicle manufacturers are expected to apply engine and transmission improvements, and the use of low rolling resistance tires to meet the requirements. In addition, under the proposed standards up to 18 percent of some vocational vehicle types are expected to use hybrid technologies.

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AIR POLLUTION SPECIALIST ATWAL: For large pickups and vans, the proposal would reduce CO2 emissions by approximately 16 percent beyond phase 1. To meet the standards, pickup and van manufacturers are expected to use various engine and transmission improvements, aerodynamic devices, weight reduction, as well as modest use of gasoline hybrids.

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AIR POLLUTION SPECIALIST ATWAL: The NPRM is structured around five alternatives as shown in this table. Alternative 1 is the no action alternative. It is what would happen if no standards beyond phase 1 were implemented. Alternative 2 would require only modest improvements, essentially relying on off-the-shelf technologies, much like phase 1 did.

The prosed alternative is alternative 3. It

would rely largely on accelerating use of currently available technologies. Alternative 4 is identical in stringency to alternative 3, but its implementation would be pulled ahead by three years.

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Alternative 5 consists of relatively ambitious standards with modest penetrations of advanced technologies. Under the NPRM, EPA is seeking comments only on alternatives 3 and 4.

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AIR POLLUTION SPECIALIST ATWAL: As mentioned, the only difference between alternative 3 and 4 is the year each would be implemented. The improved fuel efficiencies resulting from either alternative would decrease fuel use, which equates to fuel savings that would eventually pay for the upfront cost of the required technologies.

Alternative 4 would require additional up front capital costs compared to alternative 3. But as shown here, for the most part, the additional cost is inconsequential, based on the time it would take to pay back the upfront costs. With the exception of pickups and vans requiring an extra, the payback are -- periods are identical.

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AIR POLLUTION SPECIALIST ATWAL: In addition to

more stringent GHG standards, the phase 2 proposal includes several other improvements to the phase 1 program. First, the proposal would remove the blanket exemption for small manufacturers that was in place for phase 1 by providing a fair and equitable way to comply.

Additionally, the proposal closes a loophole that allowed some trucks to use engines without emission controls. The proposal also includes a number of other significant improvements to the current test procedures that better reflect a real world operation.

These include the addition of road grade, a new Idle cycle for vocational vehicles, improvements to U.S. EPA's greenhouse gas, or GEM, computer server vocation model, and numerous other test cycle improvements.

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AIR POLLUTION SPECIALIST ATWAL: Next, I will discuss ARB staff's initial assessment of the federal proposal.

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AIR POLLUTION SPECIALIST ATWAL: After an initial review, staff believes the proposal is an important next step in reducing GHG emissions for medium- and heavy-duty trucks. However, we also believe it could be significantly strengthened in specific areas. Each of the items listed here are discussed in further detail in the

next few slides.

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AIR POLLUTION SPECIALIST ATWAL: As outlined in this year's funding plan for the Air Quality Improvement Program and Low Carbon Transportation Greenhouse Gas Reduction Fund investments, which the Board approved last some, ARB is dedicating significant incentive funds to develop and deploy advanced technologies, such as battery

elect, fuel cell and hybrid technologies.

Widespread deployment of such technologies will be needed for ARB to meet our climate and criteria pollutant targets. The phase 2 proposal is not sufficiently stringent enough to drive market development of these technologies. For example, the proposal assumes only a modest penetration level of hybrid technology, and no significant level of electric or fuel cell technology.

Additionally, the proposal would eliminate the phase 1 advanced technology credits that were included in phase 1 to encourage the use of advanced technologies, such as zero emission vehicles.

Overall, the proposal is bearish on battery and fuel cell technology, which is contradictory to ARB's position on the opportunities and potential of these technologies.

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AIR POLLUTION SPECIALIST ATWAL: Of the two alternatives on which the federal agencies are requesting comment, staff strongly recommends alternative 4. Alternative 4 is technologically feasible and will do more to deliver early emission reductions and encourage the development of CO₂-reducing technologies than alternative 3.

In addition, a fully phased in program three years earlier would allow for more timely action to pursue NOx reduction measures nationally. Finally, as shown in more detail on the next slide, the earlier emission reductions provided by alternative 4 are vital if California is to achieve our GHG and petroleum targets for 2030 and 2040.

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AIR POLLUTION SPECIALIST ATWAL: This chart plots the cumulative California CO₂ emission benefits from both alternative 3 and 4 from 2018 to 2030. As shown alternative 4 would provide and additional approximate four million metric tons of CO₂ benefits by 2030.

Alternative 4's benefits nationwide would be even greater. If alternative 4 is adopted, phase 1 and 2 together would achieve approximately 22 percent reduction in petroleum use from the medium- and heavy-duty sector in 2030. This reduction would be a step forward towards

reaching the Governor's goal of reducing petroleum use by 50 percent by 2030.

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However, this level of reductions alone is insufficient to meet our petroleum reduction and climate goals, and additional steps, such as broader use of renewable fuels and increasing use of zero emission technologies as necessary.

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AIR POLLUTION SPECIALIST ATWAL: The proposal will encourage manufacturers to increase the use of auxiliary power units, or APUs, to reduce CO2 emissions that the truck would otherwise emit during idling conditions.

However, PM emissions are projected to increase with this action, because at the federal level, diesel particulate filters are not required on APUs. All of this issue does not affect California, because we do require the use of diesel particulate filters on APUs. For National public health reasons, staff strongly supports extending the California requirement for installing DPFs on a national basis. The emissions impact of a diesel particulate filter equipped APU is illustrated on the next slide.

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AIR POLLUTION SPECIALIST ATWAL: Shown here by

the red bar, U.S. EPA estimates the proposal would increase diesel particulate matter emissions by nearly 10 percent. If U.S. EPA were to require a diesel particulate filter APUs, diesel particulate matter from heavy-duty trucks would decrease by nearly nine percent, as shown in the green bar. Again, we encourage U.S. EPA to take immediate action on this issue.

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AIR POLLUTION SPECIALIST ATWAL: California needs dramatic further reductions in NOx emissions from heavy-duty trucks to attain health-based standards for ozone and fine particulate matter, particularly in the South Coast and San Joaquin air basins.

In particular, federal action is needed for the largest heavy-duty trucks, which currently -- which frequently cross State lines and therefore cannot be effectively regulated by California alone.

It has been argued by some stakeholders that additional NOx reductions cannot be achieved without causing associated GHG increases. However, the so-called GHG NOx tradeoff can be avoided with an integrated systems based approach. Several technologies, such as advanced selective catalytic reduction systems, passive NOx absorbers, stop-start technology, and many others have demonstrated significant NOx reductions with no adverse

GHG impacts.

This systems-based approach is currently being demonstrated through an ARB contract with Southwest Research Institute. This project will not be completed until this time next year, but it has already shown tremendous progress towards meeting its goal of reducing NOx emissions by 90 percent with no or minimal impacts on GHG emissions.

Because it is critical that the steps must -that steps must be taken on a national level to reduce NOx
emissions, staff intends to formally petition U.S. EPA
this fall to take timely action to develop a new mandatory
lower NOx standards from medium- and heavy-duty vehicles.

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AIR POLLUTION SPECIALIST ATWAL: Listed here are several additional areas where the proposal could be improved. The proposal -- the proposed stand-alone engine standard could be significantly strengthened. Engine technology is currently available and projected to be available in a time frame covered by this proposal justify a stronger engine standard. The largest manufacturer of heavy-duty truck engines, Cummins, has publicly stated engine CO2 reductions on the order of nine to 15 percent are feasible in the phase 2 time frame.

For trailers, the proposal requires aerodynamic

technologies only for box-type trailers. Such technologies could likely be applied to other trailer types, such as flatbeds, and possibly some tankers and container chassis.

Finally, over the past year, an ARB funded study on the potential use of aerodynamic devices on a variety of vocational vehicles demonstrated that significant potential exists for GHG reductions from many vocational vehicle types. Thus, the proposed standards, applicable to vocational vehicles, could be tightened to encourage the use of these aerodynamic devices.

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AIR POLLUTION SPECIALIST ATWAL: The final part of this presentation will be a discussion of staff's recommended next steps.

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AIR POLLUTION SPECIALIST ATWAL: Staff is continuing to conduct and in-depth review of the proposal and will submit formal comments to strengthen the proposal within the next 60 days to the federal docket.

Additionally, ARB plans to testify at the federal public hearing, which is tentatively scheduled for next month in Los Angeles.

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AIR POLLUTION SPECIALIST ATWAL: Now and after

the 60-day comment period, staff will also continue to engage Section 177 states and other stakeholders and will continue working with U.S. EPA and NHTSA staff to improve and strengthen the proposal. A final rule is expected spring 2016.

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AIR POLLUTION SPECIALIST ATWAL: California remains committed to a strong and single national program, which will help us achieve our GHG stated commitments, and that puts the rest of the nation on a similar path to reducing GHG emissions. Six to 12 months after the federal rule is adopted, staff plans to return to the Board with its own phase 2 proposal. Tentatively, we expect this to be mid-2017. This proposal may contain California-only elements, depending on the final stringency of the federal program.

Thank you. We would be happy to address any comments or questions.

CHAIR NICHOLS: Thanks. Did you have any closing comments or shall we just go to the speakers?

EXECUTIVE OFFICER COREY: To the speakers.

CHAIR NICHOLS: Okay.

BOARD MEMBER BALMES: Could I just ask one dumb question?

CHAIR NICHOLS: Yes.

BOARD MEMBER BALMES: So the issue of the auxiliary power unit. So why would this be a way to deal with the phase 2 requirements?

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DEPUTY EXECUTIVE OFFICER AYALA: The use of the APU would allow you to essentially turn off the main engine. And by virtue of the fact that it's --

BOARD MEMBER BALMES: When you're -- in terms of refrigerated unit?

DEPUTY EXECUTIVE OFFICER AYALA: Correct.

BOARD MEMBER BALMES: Yeah, okay.

DEPUTY EXECUTIVE OFFICER AYALA: For hoteling services, typically, drivers need to have access to power for.

BOARD MEMBER BALMES: Okay. Thanks.

BOARD MEMBER SPERLING: Are those APU energy uses included in the overall standards in some way?

CHAIR NICHOLS: In the emission standard. The basic emission standard.

DEPUTY EXECUTIVE OFFICER AYALA: Sorry. They are included in the overall assessment, and that's why EPA is proposing to use the APU as an alternative to generate emission reductions in terms of GHG from the engine itself.

BOARD MEMBER SPERLING: Okay.

CHAIR NICHOLS: It's a really -- this issue is

new to me, too. I've never seen this happen before. It's a novel -- a novel idea, I would say. I do want to say that this is a huge area of importance, obviously, in terms of the overall emissions impact. It's also something that has implicated our staff to a very great degree. In the past, I would say we haven't necessarily ignored what EPA was doing, but we've not given it the level of involvement at the staff -- technical staff level that we have with this one, because this is just so critical to us.

And I think you're hearing that our staff does feel that on very various different points that EPA is not -- not only are they not being technology forcing, but they are not even perhaps looking at current technology. So we do need to be very actively engaged on this one.

We have several people, actually seven, who have signed up to speak, so I think we should hear from them, beginning with Henry Hogo from the South Coast Air Quality Management District.

MR. HOGO: Good morning, Chair Nichols and members of the Board. Henry Hogo, Assistant Deputy Executive Officer at the South Coast Air Quality Management District.

I want to first say that we are in agreement with staff's initial assessment. Never consistent with what

we've seen in the proposal and we do need to strengthen the proposed rule-making. I do want -- and we will be putting some of our comments in on behalf of the South Coast AQMD.

I do want to comment on the NOx issue. And we were very disappointed that EPA did not come out with any proposal for NOx -- new NOx emission standards. And we want to urge EPA to do this as quickly as possible.

Yesterday, we participated on a call with the National Association of Air Pollution Control Agencies. And they will be putting in a similar set of comments, very similar to staff's initial assessment. And they would urge EPA to start rule-making concurrently as the current proposal is being finalized. We believe this is a very important timing issue that we need to have these standards put in place as soon as possible to help us meet air quality deadlines.

The second point I want to make is just to reiterate what Dr. Wallerstein commented on last month that we have limited resources. And if we were to deploy these new technology vehicles we need to identify new sources of funding. And we want to continue work with you on identifying those sources of funding.

Thank you.

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BOARD MEMBER SHERRIFFS: Can I ask a question?

CHAIR NICHOLS: Yes, a question.

BOARD MEMBER SHERRIFFS: I'm glad to hear South Coast is being proactive in terms of addressing your concerns to EPA. Is CAPCOA involved in this or other air districts partnering to address comments to EPA, because obviously NOx is so critical for South Coast and also the San Joaquin Valley?

MR. HOGO: We will bring that up with CAPCOA, not -- personally I'm not sure what CAPCOA's association will be doing at this point.

CHAIR NICHOLS: Okay. Thanks.

Mr. Sharpe.

DR. SHARPE: Thank you, Chair Nichols and the Board for your attention to this -- on this important issue, and for the chance to share a few early reflections on the U.S. phase 2 proposed rule-making. My name is Ben Sharpe. And on behalf of the International Council on Clean Transportation, I'd like to say that while we are pleased with many aspects of the U.S. EPA and its proposal, we are still examining the technical aspects to determine how to strengthen the stringency of certain elements of the rule, such as the four percent efficiency improvement required from engines, or alternatively, to accelerate the implementation deadlines of the rule to 2024 or 2025.

We've undertaken a two-year research program that has produced a dozen major technical reports on truck technologies, costs, and regulatory design questions for phase 2. As we continue to study the proposal, it is clear that the agencies have made a data driven and deeply analyzed proposal for phase 2 that promotes low-carbon technology across the heavy-duty vehicle fleet.

As a matter of their stakeholder engagement, it is especially clear that this was a highly inclusive process where the agencies took in the various stakeholder perspectives, and they went through the great pains to understanding the many technical issues at play. The ARB workshop this past April was a very constructive addition to this process, as were the countless productive meetings between the three agencies, industry, research, and environmental organizations.

For trailers in particular, the ARB tractor-trailer greenhouse gas regulation, along with ARB staff's input into the process, appears to have been a leading reason why the proposed federal rule will ensure that much of California's great efforts result in a federal fleet of more efficient trailers that follows California's pioneering work in this area.

The sustained efforts of the ARB team coupled with the strategic involvement of ARB leadership has

continually nudged the federal agencies towards a long-term regulatory proposal that promotes the uptake of fuel-saving technologies out to 2030 that are beneficial to both the trucking industry and society as a whole.

California's leadership so far has put automobiles into a position to directly contribute to the State's push to cut oil use in half by 2030. These new heavy-duty standards bring trucks into play as a major piece of the California climate mitigation portfolio, and its bold use -- and its bold move to cut oil use in half.

Finally, to add an international note, it is evident to us at the ICCT that the proposed rule is already having an impact outside our national boundaries. We have already briefed ministries and regulatory agencies in India, Europe, Mexico, and China about these developments. And they and others are keen to see how they too can embrace Similar policy to promote the same efficiency technologies.

So with that, thanks very much for the chance to provide some of our early reflections. We look forward to continued engagement with the ARB staff on this very important rule. So thank you very much.

CHAIR NICHOLS: Thank you.

BOARD MEMBER SPERLING: Excuse me, could I ask a question?

1 CHAIR NICHOLS: Yes, fine. 2 BOARD MEMBER SPERLING: So Dr. Sharpe who is I 3 know a brilliant analyst, because he graduated from UC 4 Davis. 5 (Laughter.) 6 CHAIR NICHOLS: This is not a time for 7 commercials. 8 (Laughter.) 9 BOARD MEMBER BALMES: And he survived you? 10 (Laughter.) BOARD MEMBER SPERLING: What -- ICCT is playing 11 12 an important role as a -- you know, in terms of the 13 analysis. Is there an ICCT position with respect to some 14 of these concerns that were raised by the staff, 15 especially the -- like the four percent, you know, engine 16 improvement, the NOx issue, and the advanced technology 17 issues? 18 DR. SHARPE: Yes. Professor Sperling, thank you 19 for the question and the UC Davis plug. 20 (Laughter.) 21 DR. SHARPE: Yeah, to your question, we're 22 certainly in the process of looking at all those areas. 23 In particular on the engine standard, we're trying to 2.4 determine what is the indicated standard that's being

promoted as part of the vehicle standard. So we're trying

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to figure out for a typical compliance pathway what is the engine going to have to do with respect to the other technologies in getting the tractors to where they need to be.

Our initial guess is that it's likely going to be higher than that four percent number, but we're just trying to figure out, you know, what that really means and how far we can actually push on the engine side.

With respect to advanced technologies, I think that we're definitely doing our homework, particularly on the vocational side. I think some of the assumptions regarding hybrid vehicle penetration deserve another look, so we're definitely going to look on that area. And there are definitely other technology areas throughout the rule, lots of details in the 2,000 plus pages of regulation and all the supporting documents. So we'll definitely have our hands full the next -- next couple months to try and get in our public comments, but we'll certainly be addressing all those areas.

BOARD MEMBER SPERLING: Thank you.

CHAIR NICHOLS: Thank you.

We'll hear next from Jason Barbose, the Union of Concerned Scientists.

MR. BARBOSE: Good morning. Jason Barbose from the Union of Concerned Scientists and our organization has

been very involved in the development of these rules and working with ARB staff. Unfortunately, those most involved haven't -- aren't able to be here today, but I still have some initial reflections to share with you all.

Our own analysis shows that trucks could be 40 percent more efficient in 2025 compared to 2010 levels, in line with Alternative 4 that was discussed. And that stands in contrast to the agency's target of a 36 percent improvement by 2027. So we believe that U.S. EPA and NHTSA have left technology on the table, so to speak in a and number of key areas, as a result. And I think this is a key point to hang onto is that under the agency's own projection of rising truck traffic, greenhouse gas emissions from heavy-duty trucks would not dip below today's levels if the rule is finalized as proposed.

And so we believe there are several areas where the rule should be strengthened to maximize the benefits. And many of these will sound familiar, because they're things that staff just mentioned to you. One is improving the stringency of the engine standard. So the four percent improvement that's been mentioned in tractor engine efficiency by 2027, manufacturers have publicly stated that they would be able to achieve an additional nine to 15 percent efficiency improvement over phase 1. And so if this rule is meant to raise the bar for

investment in R&D, it must be stronger in that regard.

Second is improving the performance trailers. So although we're pleased to see trailers regulated for the first time, the proposed rule does not surpass technology that is already in the marketplace, and certified under EPA's SmartWay Elite Program.

The third point is encouraging a shift away from oil as the dominant transportation fuel. As we know California quite well to achieve our long-term climate goals, we need to be moving forward on advanced technology vehicles. And we agree with staff that the rule underincentivizes investments in the hybrid and battery electric heavy-duty trucks that can help us achieve our oil and climate reduction targets in 2030 and beyond.

And then finally, a point to make around natural gas vehicles becoming more efficient. It's easier for natural gas vehicles to meet the standards than diesel vehicles, due to the lower carbon content of the fuel. However, in the rule, diesel and natural gas trucks only need to achieve the same tailpipe standard, which means that while diesel engines must continue to improve, natural gas engines don't.

And in addition, the contribution of upstream emissions of natural gas is not taken into account in the rule. And while there's, of course, debate about the most

appropriate value assigned to those, it's clearly not a value of zero, and so these emissions could undermine the climate benefits of the rule.

So with that, thank you for the opportunity to speak today. We look forward to working with ARB to provide the necessary data to EPA and NHTSA to strengthen the standard.

CHAIR NICHOLS: Thank you very much. Thanks for your support on this.

Christine McCain from EDF.

MS. McCAIN: Hi. Yes. My name is Christine McCain with Environmental Defense Fund. I'm presenting testimony here today on behalf of my colleagues who are legal and regulatory experts in the climate and energy program at EDF who could not be here today, but would be happy to address any additional questions.

Thank you, Chairman Nichols and to the Board for the opportunity to provide comments on the U.S. EPA's phase 2 proposed rule-making for medium- and heavy-duty truck and buses. EPA's phase 2 standards represent an important opportunity to address the most swiftly growing source of greenhouse gas emissions from the transportation sector in the United States.

Rigorous standards can dramatically reduce harmful climate pollution, save truckers money, and

improve our nation's energy security. Californians demonstrated critical leadership in this area, recognizing the importance of achieving emissions reductions from the State's large trucks and buses, actions that have spurred critical progress, both statewide and nationally.

The Board's efforts to improve trailer efficiency, for example, have yielded benefits and are now an important feature of EPA's proposed rule. Just in the last few days, the Governor announced an initiative to further strengthen environmental and economic performance of California's transportation sector through an integrated action plan that establishes clear targets to improve freight efficiency, transition to zero emission technologies, and increases in competitiveness for California's freight system.

EPA's proposed standards are one of the single most important opportunities to protect human health and the environment in California, in light of the Governor's Executive Order. And while EPA's proposal is an important step forward, there are many key opportunities to strengthen the proposal in a way that secures emissions reductions that are needed to protect families and communities, and that spurs technological innovation in a way that truly ensures we are building the trucks of tomorrow.

We are especially concerned that EPA's proposal locks in today's technologies through 2030. If not strengthened, the proposal will represent a serious missed opportunity to secure these cross-cutting climate economic and energy security benefits.

Environmental Defense Fund respectfully requests your leadership in ensuring that EPA's proposed emission standards are strengthened in a way that realizes the Governor's executive order and protects California's health and the economy.

In addition to other opportunities, we would like to highlight two areas where its particularly important that EPA's proposal is strengthened.

First, a strengthened engine standard. If -- it is foundational that EPA strengthen the proposal -- the proposed engine standard to provide for at least a 15 percent improvement in engine efficiency, more than three times greater than what is reflected in EPA's current proposal. Analyses from EPA, CARB, ICCT and others demonstrate that a highly cost -- that highly cost effective technologies are currently available to achieve these standards, and they must be reflected in the rule to drive progress.

Secondly, that the standards be fully implemented by 2024. To ensure EPA's standards drive emissions

reductions, it is essential that they are fully implemented by 2024. And EPA's own analysis suggests that this is imminently feasible.

CHAIR NICHOLS: Thank you. Appreciate your being here.

Ms. Magavern.

MR. MAGAVERN: Bill Magavern with Coalition for Clean Air. And again, we come back to the importance of the freight sector, and we need, in order to get to air quality attainment especially in South Coast, San Joaquin Valley, and to meet the goals that have been set by the Governor for greenhouse gas emission reductions and petroleum reduction, we need to get every possible gram of reduction out of this rule at U.S. EPA.

I think your staff presentation was excellent, and we agree with the need to strengthen the rule, both in terms of maximizing advanced technologies and getting the most CO2 reductions out of it, also making sure that we're not getting increased PM from the APUs. And strongly agree with your staff and with South Coast on the need to have a low NOx standard from U.S. EPA.

So we will do what we can to help. I know EPA is holding a hearing in Los Angeles, and we'll be speaking there, and look forward to working with you to get the strongest rule possible from U.S. EPA.

Thank you.

CHAIR NICHOLS: Great. Mr. Barrett.

MR. BARRETT: Hi. Good morning again. Will Barrett with the American Lung Association of California. I guess it's afternoon now.

I wanted to just say it was a wonderful presentation. I really appreciate the analysis that went into that in really laying out the areas that California needs to really make the most of this program. We see the phase 2 standards as a major opportunity in our fight for clean air, and a healthy climate.

The Lung Association is committed to working with you to carry forward a lot of the policies that you've laid out here today.

As called for in the Governor's Executive Order on freight just last week, we view the transition to zero emission technologies as a key step. We need to cut climate impacts on public health, also to reduce the billions of dollars and thousands of deaths, emergency room visits and hospitalizations caused by our freight sector every year that is dependent on harmful fossil fuels.

So we support your work to continue elevating the electrification and advanced technologies, and really to continue to lead the push for a low NOx standard by the

EPA. We think that that's critical just to, you know, really target those interstate trucks that are coming into California neighborhoods and causing pollution beyond what our regulations allow. We just think that the NOx issue is really critical and really want to support that as well.

So I just wanted to again thank you for the report. A lot of my colleagues have spoken before me from the California Clean Air Freight Coalition have summed up a lot of the points. So I'll leave it at that and thank you very much for your work.

CHAIR NICHOLS: Okay. Great.

Ms. Mendoza.

MS. MENDOZA: Good afternoon, Chair Nichols, Vice Chair Berg and the Board and staff. I just wanted to note, personally I'm extremely pleased that the leadership of the Board are two women from Southern California, being a woman from Southern California myself. I'm very excited. I've actually been emailing about it with several friends and colleagues.

(Laughter.)

MS. MENDOZA: Just -- I actually -- this came up in the revised version of the Board agenda, which was releases earlier this week. So I personally don't have any perspective yet on the EPA phase 2 GHG standard. My

comment today is simply a question. It's a process question. We talked about how there's a 60-day comment period, and the staff will be preparing a comment letter to submit to EPA on or before September 11, 2015.

I just wondered if there was going to be another opportunity before the Board for the public to hear what the staff's letter is going to say. This morning, you have very specifically stated it's an initial review. And I wondered if there was going to be another presentation before the Board? And if not, if there was going to be an opportunity for the public to see the comments before they are submitted to EPA or if we will see them simultaneously as they are submitted to EPA?

So if staff or the Board could provide some insight into what the public process will be between now and September 11th, I'd be very appreciative.

And thank you very much.

CHAIR NICHOLS: It appears that Ms. Mendoza was the last witness on this item, so we should probably bring this to a discussion with the Board at this point. As I've indicated, I think this is going to be occupying a lot of our staff time over the coming months and year. And there are going to be a variety of different forums where we're going to be talking about freight and about emission standards, but I'm not sure about the process

specifically on this rule-making. I am concerned, and I do want to clarify that although we would like to see EPA institute a NOx rule making, and we will be pushing them to do this, this particular proposal couldn't be modified to become a NOx rule-making just because we think that should happen.

There is a limit to how far you can go into terms of taking a proposal and turning it into something different and better by the time it becomes final, if EPA were truly to decide that they wanted to do both things at once, they might even have to pull back this proposal, which is not something that we're urging them to do.

But we do think that there's room, not just within this alternative that they've taken comment on, which is an important step in terms of allowing for strengthening of the proposal, but even pulling things from other parts of the record, I would say, that could improve on what's in alternative 4, which is, as has been said, is really just alternative 3 but with a different time frame.

So it's a little bit -- a little bit complicated, but I am hoping that our comments will not only reinforce the importance of 4, but seek ways in which 4 itself could be improved as well. But this is going to be a -- it will be a long process, but it's on a time frame that the Obama

administration has committed to getting done. So we think that this is going to have a lot of attention at the highest levels of the administration. And so it's something that is really worth our paying close attention to.

As far as a process within the State of California for reviewing the State's comments, I'm assuming that there are other entities, including the NGOs who were here today, and industry's who may be commenting on this rule-making as well, and it probably would be a good idea to have some informal process at least for sharing our comments before they actually have to be submitted. That's a question as well as a comment.

DEPUTY EXECUTIVE OFFICER AYALA: Yeah, I think I can address that. I mean, we don't necessarily have to put out the letter in draft form for stakeholders to understand and to get a sense, in terms of where we're going to go with this.

I think today we were very deliberate in our presentation to pick for you and highlight the key issues. You heard that EPA is going to be having public hearings, that we are hoping that we will have strong participation. Hopefully, Chair Nichols will be there to speak on behalf of the Board.

Through that process, I think the stakeholders

are going to get a sense in terms of how we are refining our thinking in terms of the comments. Obviously, as our partners in the NGO community referred to, we will continue to engage with them on the technical aspects of the rule-making. We will continue to make ourselves accessible to folks who want to come in and talk to us, and discuss about the different technical aspects, what we understand, what they understand. So I think, again, I don't necessarily think that we have to commit to putting out the draft letter for them to know where we're going.

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CHAIR NICHOLS: It's not a rule-making.

DEPUTY EXECUTIVE OFFICER AYALA: Correct.

CHAIR NICHOLS: That's a fair point. I also would say that Dr. Sherriff's comment about engaging the air districts is a useful one, because they not only bring in their own Band-Aids and their own technical information, in any cases, but also local elected officials who may also want to be involved in this effort as well, which could certainly be very helpful to giving EPA the backing that they need to come out with a more aggressive final than what might be suggested from the proposal.

Are there any other comments from Board members?

Yes, Professor Sperling, and then Mrs. Mitchell.

No, I called on Dan first. It's okay.

BOARD MEMBER SPERLING: Okay. Other than the NOx issue, it seems like what would be most important and relevant to California would be this advanced technology question. And it's kind of an interesting one, because just like with the ZEV mandate, you know, we can go our own way if we wanted to. But it seems like the -- I mean, the two -- so, I guess -- I mean, we obviously are thinking about that in various forms as part of the sustainable freight initiatives.

But with respect to this national standard, I guess I have two small -- two questions. One is why did they remove the credits for advanced technology, and -- I mean, it seems like -- I mean, you know, on the face of it, it doesn't make any sense. And number two, if they did take advanced technology more seriously. I mean, even if you said, okay, California is going to do something, okay, that's 10 percent or more of the market, that by itself, you know, could justify increasing their emission standards.

So, I mean, what's their thinking on advanced technology and kind of any preliminary thoughts on what we might do on our own.

MOBILE SOURCE REGULATORY DEVELOPMENT BRANCH CHIEF CARTER: Yeah, I could try. Yeah, Dr. Sperling, in phase 1, they did have the advanced technology credits. In

phase 2, they're proposing not to, and they're seeking comments on that -- on that issue.

I think the rationale is in EPA's view, they view advanced technologies as waste-to-heat recovery, that kind of a thing. And therefore, in their view, there probably won't be anymore advanced technology for phase 2.

And so they're thinking that maybe it's not even necessary, why give double credit kind of a thing. But they're seeking comment on that.

BOARD MEMBER SPERLING: Okay. So we're -- I presume and hope we are commenting that we define advanced technology differently, right?

MOBILE SOURCE REGULATORY DEVELOPMENT BRANCH CHIEF CARTER: Yes.

DEPUTY EXECUTIVE OFFICER AYALA: And just to add to that, again, for me, it's an issue of consistency. This Board has committed significant amount of investment into these technologies. And again, to -- for us to have a proposal that doesn't help us drive innovation, so that we can reap the benefits of the investment that California is making today, creates a -- frankly, an issue for us. And those are some of the things that we want to highlight for EPA.

Coming back to your second point on advanced technologies as well. Again, it's this issue where you

know very well, Dr. Sperling, the -- in the car standards we got into the situation where similarly advanced technologies are not recognized. And frankly, it becomes more difficult for us to push for advanced technology, when the standards themselves don't necessarily credit or recognize the role that advanced technology has.

So what I'd like to do is for us to consider very carefully, to the extent that we think that it's the right path, and if we have a better path, I think this is a rule that is going to create the opportunity for us to make sure that whatever California does, it recognizes in the most adequate way what the future role of these very advanced technologies are going to be, consistent with our investment decisions.

CHAIR NICHOLS: I think you used the term missed opportunities at the beginning. And that really is, I think, the way to look at this.

BOARD MEMBER SHERRIFFS: And it's not just our investment, it's industry is invested in this going down this path. And we need to support that and we need to continue to push.

DEPUTY EXECUTIVE OFFICER AYALA: Exactly.

CHAIR NICHOLS: I'm sorry. I did call on Mrs. Mitchell. And I let a free-for-all happen, which I

25 | contributed to, so --

BOARD MEMBER SPERLING: Can I just close on -- follow up on that?

CHAIR NICHOLS: Yes, you may finish up.

BOARD MEMBER SPERLING: And that is could I suggest that we possibly do some kind of briefing on the advanced truck technologies, but not in terms of, you know, this company is doing this and that, but in a more substantive, strategic kind of way? You know, the kind of companies that are engaged, you know, trajectories going forward kind of thing, because it's relevant, not only for this, but perhaps even more -- not perhaps. It is even more so for the sustainable freight initiative.

DEPUTY EXECUTIVE OFFICER AYALA: Right. We'd certainly be more than happy to accommodate you and any other Board members. And, at this point, I should also acknowledge that subsequent to the release of the proposal, we have had discussions with our friends at EPA and NHTSA. And we are again together going to be taking a second look at this issue of advanced technology, again in direct response to some of the initial points that we've highlighted.

So there is going to be an opportunity for us to both at our level with you as well as collectively with the agencies to take a look at exactly what you said, who are the players that are bringing the technology to the

marketplace that could potentially provide us these opportunities?

BOARD MEMBER BALMES: I would just request that that be at a Board meeting as opposed to just Dr. Sperling.

CHAIR NICHOLS: Okay. Thank you.

Ms. Mitchell.

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BOARD MEMBER MITCHELL: Thank you, Chair Nichols.

What was striking to me in the staff presentation are slides 29 through 31. It's really frightening that we might be increasing diesel PM with these APU units. We just heard in our last presentation that diesel is responsible for about 60 percent of the cancer risk. And so I would certainly hope that our letter would emphasize the negativity of that.

The other thing that is, of course, on my mind, as the South Coast representative, is the NOx issue.

You've heard me say many times that San Joaquin and South Coast have to reduce their NOx by 60, 70 percent by 2023.

And although this phase 2 is directed to greenhouse gases, we've talked here many times about the reduction of NOx along with greenhouse gases with applications that can accomplish reductions in both categories.

And I don't know that we can work that into our letter, but I think it would be useful. I know the staff

report refers to a systems-based approach, and that may be the way we present that to EPA.

And another way to get NOx reductions is to emphasize advanced technologies. I mean we will get there with those technologies. And I think California is doing a lot with that, and some of our probably Section 177 states are working on that with us.

So I would want to emphasize that and try to get on the same definitional path with EPA that we have here with advanced technologies. I think those are really important directions for our State when we work on this.

Henry Hogo mentioned starting a concurrent rule-making on NOx. I don't know whether that is something we can do. Would it be appropriate to emphasize that? I think it would be very beneficial to our State to be working on those.

So thank you.

CHAIR NICHOLS: It was a request to EPA to begin a rule-making on NOx. And I think that is a worthwhile thing to do for them to be considering, as opposed to just leaving it out there.

Any other thoughts or comments at this point?

If not, this is the beginning of a long effort,
and we will be hearing more about it. So I think we can
conclude for today.

We do have one witness who signed up under the public comment and so we'll hear from him for three minutes. And then we can take our break. So we will now call for the public comment period. Mr. Todd Kahl.

MR. KAHL: Well, thank you, Board, for all the wonderful work you're doing. From what I'm hearing today it's very inspiring.

All I'm here today is to -- for 12 months I've been trying to replace my equipment. And I'm the guy that fell through all the cracks of all the rules and all the regulations. And having to report by December of 2013 would have meant that you'd have to know your financial future. And after five years of bad recession for the construction industry, losing my home, now I'm in a position where I can't get funded.

I've got a VIP grant. It's only for \$15,000.

Trucks are 180,000. I've been trying for 12 months. When I wasn't eligible, I got on this 20,000-mile work program.

Bottom line is, when I'm out of miles, all this Board and all your people are telling me is park it and go home.

I can't get into a truck. So this is the face of the guy that fell through all the cracks of your meetings and your rules and your regulations. My kids look at me, well, what's wrong, Dad? Twelve years of building my company, I've just got to park it?

And all we're talking about is another 20 grand -- 15 or 20 grand. I can get approved with 30 percent -- 20 percent down on a new truck. But Adam Shapiro can't do it, but La Ronda Bowen can't do it. Your CalCap lending people can't do it. All everybody is telling me is when you're done with your 5,000 miles, you're out of business, and I'm a one-man show.

So at 51 years old, where do I go and get a job, or -- have you every tried to get a loan as a sole proprietor? They don't loan money to sole proprietors, especially in the construction industry.

So if there's anyway anybody can help me, get me and keep me in business and not just say, well, it's Adam's problem, it's Mary's problems, it's all your other people's problems. It's Todd's problem. I reported late. I get it. But my financial future in 2000 -- in December of 2013 was only one good year after five bad ones, and I've been trying for 12 months. My credit is knocked down for trying to get a truck. I can't do it.

I've been approved for 20 percent down. And because I reported late, I've offered to throw in another truck. So it's all this bureaucratic stuff is not really about getting dirty trucks off the road, because I want to drive my two 25 year old trucks until you arrest me or help me get another truck.

So I just don't know where to go. I'm at my wits' end. I've lost \$1,000 worth of wages today to be here. I'm about ready to crack. My blood pressure is through the roof, and there's hundreds of millions of dollars going through this organization, and I need 20 grand more. Thank you for your time.

CHAIR NICHOLS: Well, thank you for coming here today, and appreciate the fact that you have been plight, considering I know the pressure that you're under.

MR. KAHL: I've left you 10 messages and you've never called be back. Several -- several messages.

CHAIR NICHOLS: I do understand that you have had some communications with ARB staff in the past. I don't want to turn this into a who said what to whom.

MR. KAHL: I know. Neither do I. I mean you guys -- what I've heard today in the last 20 minutes about the new technology, we're in -- we're in a situation. The governor being in Rome the other day, we are in extinction if we don't fix it. But I've worked 12 years to feed my kids and pay my mortgage. And because I reported six months late, I have to go out of business when there's 10 other trucks right beside me that got 40, 50, 60, 70 thousand dollars worth of grant money, and I'm different because I'm only going to get 15.

CHAIR NICHOLS: Can I just ask you something?

1 MR. KAHL: Yes.

CHAIR NICHOLS: Are you willing to stay for a few minutes and meet with staff after the meeting, so we can then ask for a report from staff on the situation.

MR. KAHL: Absolutely.

CHAIR NICHOLS: All right. Well, then let's ask for that then, if you would. We're going top adjourn right now. We're going to come back after we do our executive session for just a public -- recess of the meeting. But between now and then, if you have an opportunity, I'll ask Ms. Bowen to meet and anyone else from the technical staff who's able to also join. And then we'll see if there's -- if there's nothing more to be done, perhaps that's the answer, but hopefully we can at least find out.

MR. KAHL: That's what La Ronda has been ending at that, so that's why I'm here.

CHAIR NICHOLS: Thank you very much.

MR. KAHL: Thank you for your time.

CHAIR NICHOLS: Okay. We will be in recess then for executive session, and come back in about an hour or less to recess the meeting.

(Off the record: 12:24 PM)

(Thereupon the meeting recessed

Into closed session.)

(On record: 1:12 PM)

VICE CHAIR BERG: Good afternoon. This is Vice
Chair Sandy Berg. And I will be closing the meeting
today. First of all, we'd like to reconvene after our
closed session. Please come to order. The meeting of the
California Air Resources Board is now back into session.
I'd like to ask our Chief Counsel Ellen Peter to summarize
the closed session

CHIEF COUNSEL PETER: Thank you Vice Chair. We had a discussion of litigation, and no action was taken.

VICE CHAIR BERG: Thank you very much. And I think we had one other report back on the comment that was made in the public comment period. La Ronda Bowen would you give us a status on that please.

OMBUDSMAN BOWEN: Yes, we worked out with the small business owner that we would be to do a settlement agreement. He is going to work with Tony Brasil's group and we'll call in the -- Scott Roland or others that are doing funding issues. We did not commit to giving him any additional funding. However, we can give him additional time and establish a settlement agreement that allows him -- or requires him to save a certain amount of money toward the purchase of his newer truck. And in that settlement agreement, we have the ability to give him more -- instead of being limited to 20,000 miles on one

truck and five on the other to extend the mileage.

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If there is additional funding available for a hybrid truck or some other kind of truck that would work for him, that will all be discussed with him. But the customer was willing to look at his situation differently and work with the staff to come up with a resolution. And we can report out to the Board at a future meeting when that is complete.

VICE CHAIR BERG: Thank you very much for taking care of that. We know that the truck and bus has been very challenging for many of our small truckers and really appreciate your continuing effort in working with people. So thank you for doing that.

OMBUDSMAN BOWEN: Erik White did too.

VICE CHAIR BERG: So with no other agenda item in

16 | front of us, can I have a motion to adjourn?

17 BOARD MEMBER DE LA TORRE: So moved.

VICE CHAIR BERG: A second please?

BOARD MEMBER BALMES: Second.

VICE CHAIR BERG: All in favor?

Have a great afternoon. Thank you.

Oh, and Happy August. We'll see you in September down south.

(Thereupon the Air Resources Board meeting adjourned at 1:14 PM)

1	CERTIFICATE OF REPORTER
2	I, JAMES F. PETERS, a Certified Shorthand
3	Reporter of the State of California, do hereby certify:
4	That I am a disinterested person herein; that the
5	foregoing California Air Resources Board meeting was
6	reported in shorthand by me, James F. Peters, a Certified
7	Shorthand Reporter of the State of California, and was
8	thereafter transcribed, under my direction, by
9	computer-assisted transcription;
10	I further certify that I am not of counsel or
11	attorney for any of the parties to said meeting nor in any
12	way interested in the outcome of said meeting.
13	IN WITNESS WHEREOF, I have hereunto set my hand
14	this 4th day of August, 2015.
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